TITLE V OPERATING PERMIT

Issued pursuant to Title 22a of the Connecticut General Statutes (CGS) and Section 22a-174-33 of the Regulations of Connecticut State Agencies (RCSA) and pursuant to the Code of Federal Regulations (CFR), Title 40, Part 70.

Title V Permit Number	**104 – 0103 - TV**
Client/ Sequence /Town/Premises Numbers	**130-010-104-0007**
Date Issued	October 7, 2002
Expiration Date	October 7, 2007

Corporation :

Pratt & Whitney, Division of United Technologies Corporation

Premises location:

Aircraft Road, Middletown, Connecticut 06457

Name of Responsible Official and Title:

Lorin Sodell, Director, Facilities & Services

All pages 1 through 67 inclusive, of this document are hereby incorporated by reference into this Title V Operating Permit.

JANE K. STAHL
Arthur J. Rocque, Jr.
Commissioner

October 7, 2002
Date

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LIST OF ACRONYMS

ACRONYM	DESCRIPTION
^{o}F	Degrees Fahrenheit
ACFM	Actual Cubic Feet per Minute
ASC	Actual Stack Concentration
CAAA	Clean Air Act Amendments of 1990
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CGS	Connecticut General Statutes
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CP/OP	Construction Permit/Operating Permit
DEP	Department of Environmental Protection
DERC	Discrete Emission Reduction Credit
EMU	Emission Unit
EPA	Environmental Protection Agency
FT^2	Square Feet
GAL	Gallon
GEMU	Grouped Emission Unit
GPEE	General Permit for Emergency Engines
GPSC	General Permit for Surface Coating
HAP	Hazardous Air Pollutant
HLV	Hazard Limiting Value
HR	Hour
LB	Pounds
M^3	Cubic Meters
MASC	Maximum Allowable Stack Concentration
MACT	Maximum Achievable Control Technology
MIN	Minutes
MSDS	Material Safety Data Sheet
NOx	Nitrogen Oxides
NSPS	New Source Performance Standard
NSR	New Source Review
O_2	Oxygen
OP	Operating Permit
PM-10	Particulate Matter less than 10 microns
PSIG	Pounds per Square Inch (gage)
R	Registration
RCSA	Regulations of Connecticut State Agencies
SCFM	Standard Cubic Feet per Minute
SO_2	Sulfur Dioxide
TOP	Temporary Operating Permit
TPY	Tons per 12 Consecutive Months
TSP	Total Suspended Particulate
$\mu g/m^3$	Micrograms per cubic meter
VOC	Volatile Organic Compound

Title V Operating Permit

All conditions in Sections III, IV, VI and VII of this permit are enforceable by both the Administrator and the Commissioner unless otherwise specified. Applicable requirements and compliance demonstration are set forth in Section III of this permit. The Administrator or any citizen of the United States may bring an action to enforce all permit terms or conditions or requirements contained in Sections III, IV, VI and VII of this permit in accordance with the Clean Air Act (CAA), as amended.

Section I: Premises Information/Description

A. PREMISES INFORMATION

Nature of Business: Uninstalled engine manufacturing, assembly and testing
Primary SIC: 3724 NAIC: 54171

Facility Mailing Address: Pratt & Whitney
Aircraft Road, Mail-Stop 401-08
Middletown, CT 06457

Telephone Number: (860) 344-4320

B. PREMISES DESCRIPTION

The Pratt & Whitney Middletown facility primarily engages in manufacturing processes, assembly and testing operations and experimental part testing for the purpose of producing aircraft engines and spare parts. Other support functions are conducted, including production and military engine testing, experimental testing, steam generation, fuel storage, wastewater treatment and sewage treatment.

The four powerhouse boilers provide steam, which is used primarily for HVAC, manufacturing processes and experimental test. Two boilers are registered (R104-0015 &16) and have been grouped into GEMU-001. Keeler boiler #3 was issued OP 104-0024 on 1/20/83. Cleaver Brooks boiler #4 was issued OP 104-0036 on 10/17/85. The two permitted boilers have been grouped into GEMU-002.

Three non-vitiated inlet air heaters are used in some test programs to preheat the gas turbine inlet air. Inlet air heater #1 was issued OP 104-0005 on 1/28/83. Inlet air heaters #2 and #3 were issued OP 104-0028 and OP 104-0029 on 4/10/96. The 3 inlet air heaters have been grouped into GEMU-003.

An FT4 industrial drive engine/free turbine unit is used to drive compressors and/or exhausters to support test cell operation. The drive engine was issued OP 104-0027 on 4/10/96. It has been designated EMU-004.

The testing of GG-8 turbine engines was issued OP 104-0062 on 9/25/97. It has been designated EMU-005.

The Combustion Test Rig X-960 was issued OP 104-0030 on 4/10/96. It has been designated EMU-006.

There are three permitted diesel fueled emergency engines. A Cummins diesel generator was issued CP/OP 104-0077 on 2/29/96. An Onan diesel generator was issued OP 104-0078 on 2/29/96. Another Cummins diesel generator was issued CP/OP 104-0080 on 6/5/96. They have been grouped into GEMU-007. Eleven other diesel fired emergency engines did not require a registration or a permit and have been grouped into GEMU-008. Two other propane fired emergency engines did not require a registration or a permit and have been grouped into GEMU-009.

Test Cells 1-8 are used in the testing of uninstalled aircraft engines. The eight (8) Test Cells did not require a registration or a permit and have been grouped into GEMU-010.

Four paint spray booths are permitted. Three spray booths were issued CP/OP 104-0072, 104-0073 and 104-0074 on 7/15/94. The 3 spray booths have been designated GEMU-011. The fourth spray booth was issued CP/OP 104-0126 on 4/24/01 and has been designated EMU-012. One spray booth did not require a registration or a permit and has been designated EMU-013.

B. PREMISES DESCRIPTION, continued

The cold cleaning spray units are used to remove soils from metal surfaces on uninstalled engine parts, instrumentation or facilities equipment. They do not require a registration or a permit. The cold cleaning spray units have been designated GEMU-014.

Several storage tanks provide fuel storage for the facility. Two tanks are registered (R104-0028 & 29). Five tanks did not require a registration or a permit. All tanks have been grouped into GEMU-015.

The four boilers (GEMU-001 & 2) are covered by Consent Order No. 7014 that restricts boiler operation when burning 1% sulfur fuel. The FT4 industrial drive engine (EMU-004), the GG-8 gas turbine engine (EMU-005) while involved in development testing, and the combustion test rig X-960 (EMU-006) are covered by Consent Order No. 8098 for schedule modification. The four boilers (GEMU-001 & 2) and the GG-8 gas turbine engine (EMU-005) are covered by Trading Agreement and Order No. 8134 for Emissions Trading. The spray booths (GEMU-011, EMU-012 & EMU-013), the cold cleaning spray operation (GEMU-014) and miscellaneous hand-wipe cleaning are subject to the Aerospace Manufacturing and Rework MACT.

Section II: Emissions Units Information

A. EMISSION UNITS INFORMATION

Emission units are set forth in Table II.A.1.

TABLE II.A.1: EMISSIONS UNIT DESCRIPTION

Emissions Units	Emissions Unit Description	Control Unit Description	NSR Permit, Order, or Registration Number*
GEMU-001	Erie Boilers #1 & #2	None	R 104-0015, R104-0016 CO-7014, Trading Agreement & Order-8134
GEMU-002	Keeler FEP-13 Boiler #3, Cleaver Brooks D-68 Boiler #4	None	P104-0024, P104-0036 CO-7014, Trading Agreement & Order-8134
GEMU-003	Non-Vitiated Inlet Air Heaters #1, #2, #3	None	P104-0005, P104-0028, P104-0029
EMU-004	FT-4 Gas Turbine Engine	None	P104-0027, CO-8098
EMU-005	Testing of GG-8 Gas Turbine Engines	None	P104-0062, CO-8098
EMU-006	Combustion Test Rig X-960	None	P104-0030, CO-8098
GEMU-007	3 Emergency Engines	None	CP/OP 104-0080, CP/OP 104-0077, CP/OP 104-0078
GEMU-008	11 Emergency Engines - Diesel powered	None	None
GEMU-009	3 Emergency Engines - Propane powered	None	None
GEMU-010	8 Test Cells 1, 2, 3, 4, 5, 6, 7, & 8	None	None

Section II: Emissions Units Information

TABLE II.A.1: EMISSIONS UNIT DESCRIPTION, continued			
Emissions Units	**Emissions Unit Description**	**Control Unit Description**	**NSR Permit, Order, or Registration Number***
GEMU-011	3 Paint spray booths	Waterwash	CP/OP 104-0072, CP/OP 104-0073, CP/OP 104-0074
EMU-012	Surface Coating Operation	Panel Filters	CP/OP 104-0126
EMU-013	1 Paint spray booth	None	None
GEMU-014	Cold cleaning spray operations	None	None
GEMU-015	7 Fuel Storage Tanks	None	R 104-0028, R104-0029

(*) It is not intended to incorporate by reference these NSR Permits, Orders, or Registrations into this Title V Operating Permit.

Section II: Emissions Units Information

A. EMISSION UNITS INFORMATION, continued

The permittee shall be allowed to operate under the following Standard Operating Scenario without notifying the Commissioner, provided that such operations are explicitly provided for and described in the table below. There are no Alternate Operating Scenarios for the premises.

TABLE II.A.2: OPERATING SCENARIO IDENTIFICATION

Emissions Units Associated with the Scenarios	Description of Scenarios
GEMU-001 & 2	The standard operation of the 4 boilers is to supply steam, which is used primarily for HVAC, manufacturing processes and experimental test.
GEMU-003	The standard operation of the 3 inlet air heaters is to preheat the inlet air of engine component test rigs to simulate the actual engine operating condition.
EMU-004	The standard operation of the FT4 industrial drive engines/free turbine unit is to drive a compressor system that provides inlet air to engine component test rigs.
EMU-005	The standard operation of the GG-8 stationary gas turbine engines is the conducting of performance evaluation tests.
EMU-006	The standard operation of the combustion test rig X-960 is the conducting of performance evaluation tests.
GEMU-007, 8 & 9	The standard operation of the emergency engines is to provide emergency power (electrical & fire pumps) for operations in the facility or maintenance purposes.
GEMU-010	The standard operation of the 8 Test Cells is to test uninstalled aircraft engines.
GEMU-011, EMU-012, 13	The standard operation of the paint spray booths is to apply coatings to uninstalled engine parts.
GEMU-014	The standard operation the cold cleaning spray operations is to clean and remove soils from metal surfaces of uninstalled engine parts, instrumentation or facilities equipment.
GEMU-015	The standard operation of the storage tanks is to provide fuel storage for the facility.

Section III: Applicable Requirements and Compliance Demonstration

The following tables contain summaries of applicable regulations and compliance demonstration for each identified Emissions Unit and Operating Scenario regulated by this permit.

A. EMISSION UNITS GEMU-001 & 2

Table III.A: EMISSION UNITS GEMU-001 & 2

Pollutants or Process Parameters	Compliance Demonstration Requirements
1. Sulfur content	Limitations or Restrictions No person, except as provided in RCSA §22a-174-19(a)(2)(ii), (a)(3)(i), and (a)(3)(ii), shall use or burn fuel which contains sulfur in excess of a maximum of one percent (1.0%) by weight (dry basis). [RCSA §22a-174-19(a)(2)(i)] i. Monitoring and Testing Requirements The permittee shall monitor the sulfur content of the liquid fuels burned in four powerhouse boilers, using either a fuel certification for a delivery of fuel from a bulk petroleum provider or a copy of a current contract with the fuel supplier supplying the fuel used by the equipment that includes the applicable sulfur content of nongaseous fuel as a condition of each shipment or by sampling after each transfer/shipment to the large bulk storage tanks. [RCSA §22a-174-33(j)(1)(K)(ii)] ii. Record Keeping Requirements The permittee shall make and keep records of the sulfur content of the fuels used in the four powerhouse boilers. Records for a fuel certification and sampling shall include the following information: the date of delivery, the name of the fuel supplier, type of fuel delivered, API gravity of such fuel, the percentage of sulfur in such fuel, by weight, dry basis, and the method used to determine the sulfur content of such fuel. Records for a current contract shall include the following information: the name of the fuel supplier and type or grade of fuel delivered. [State Order No. 7014]

Section III: Applicable Requirements and Compliance Demonstration

Table III.A: EMISSION UNITS GEMU-001 & 2	
Pollutants or Process Parameters	**Compliance Demonstration Requirements**
2. Operation	Limitations or Restrictions United Technologies Corp. is approved to utilize fuel oil with a sulfur content no greater than one percent by weight (dry basis) pursuant to Section 19 of the Regulations, subject to the following terms and conditions: [State Order No. 7014] 1. The company shall operate fuel burning source P-0024 at less than or equal to 90% (135,000 lb. steam/hr) of capacity in conjunction with no more than one of the two registered sources (R104-0015, 0016). These sources are also limited to 90% (100,000 lb. steam/hr) of capacity. 2. The two registered fuel burning sources (R104-0015, 0016) shall operate concurrently at less than or equal to 90% of capacity only when the permitted source (P-0024) is not in operation or on low fire. 3. The company shall submit appropriate applications for permits/registrations noting the above-referenced conditions. 4. Maintain appropriate records, fuel consumption, operating hours, etc. to be available for inspection by the Department upon request. 5. Submit progress report(s) pursuant to the compliance timetable, which is incorporated, by reference, to this order. The Cleaver Brooks Boiler #4 may operate on-line when only one of the two 110,000 lb/hr boilers (R 104-0015 & 104-0016) are on line. This 40,000 lb/hr boiler may operate on-line during the cold start-up phase of the 150,000 lb/hr boiler (OP104-0024) but it must never operate while the 150,000 lb/hr boiler is operating on-line. [OP 104-0036] The Cleaver Brooks Boiler #4 maximum hours of operation are 7,884 hours per year. [OP 104-0036] i. Monitoring and Testing Requirements The permittee shall monitor the hours of operation and steam load of the four powerhouse boilers using log entries of the startup and shutdown times and steam load by the responsible individual. [RCSA §22a-174-33(j)(1)(K)(ii)] ii. Record Keeping Requirements The permittee shall make and keep records of the operation of the four powerhouse boilers. Records shall include the name or clock number of the responsible individual, the date, the hours of operation and the steam load when operating. [State Order No. 7014 and RCSA §22a-174-4(c)(1)]

Section III: Applicable Requirements and Compliance Demonstration

Table III.A: EMISSION UNITS GEMU-001 & 2	
Pollutants or Process Parameters	**Compliance Demonstration Requirements**
3. Fuel Consumption	Limitations or Restrictions Total premises use of 1% sulfur No. 6 fuel oil must not exceed 4,800,000 gallons per year. [OP 104-0036] i. Monitoring and Testing Requirements The permittee shall monitor the fuel consumption for the four powerhouse boilers, using either one of or a combination of fuel delivery receipts or a manual inventory reconciliation method or fuel metering devices. [RCSA §22a-174-33(j)(1)(K)(ii)] ii. Record Keeping Requirements The permittee shall make and keep records of the fuel consumption of the four powerhouse boilers. [State Order No. 7014]

Section III: Applicable Requirements and Compliance Demonstration

Table III.A: EMISSION UNITS GEMU-001 & 2	
Pollutants or Process Parameters	**Compliance Demonstration Requirements**
4. NOx	Limitations or Restrictions The owner or operator of a stationary source subject to RCSA §22a-174-22 may, in accordance with subsection (d)(1)(A) of this section, comply with the requirements of this section by meeting applicable emission limitations specified in Table 22-1 of this section. Emission limitations in Table 22-1 for turbine engines that are quantified in units of ppmvd shall be corrected to fifteen percent (15%) oxygen. [RCSA §22a-174-22(e)(1)] For "Other Boiler" the NOx limitations are 0.25 lb/MMBTU when firing residual oil and 0.20 lb/MMBTU when firing other oil. [RCSA §22a-174-22(e) Table 22-1] The owner or operator of a stationary source subject to this section may use NOx DERCs or NOx or allowances or both to comply with the applicable emission limitation contained in subsection (e) of this section pursuant to a permit or order issued by the commissioner. [RCSA §22a-174-22(j)(1)] i. Monitoring and Testing Requirements The permittee shall conduct an emission test at least once every five years for the four powerhouse boilers to demonstrate compliance with RCSA §22a-174-22. [RCSA §22a-174-22(k)(1)] Testing shall be conducted in compliance with sampling and analytical procedures approved under 40 CFR Part 60, Appendix A, or under procedures in RCSA §22a-174-5(d). On May 1, 1997, Pratt & Whitney submitted a Request for Variance to the NOx RACT Stack Testing requirement for boilers #1 & #2 (R 104-0015, 16) when burning #2 fuel oil as provided under RCSA §22a-174-13. Pratt & Whitney maintains that the testing of these sources for an emergency fuel is not economically and technologically feasible or beneficial to the environment. ii. Record Keeping Requirements The permittee shall make and keep the records for the four powerhouse boilers as described below. a. Monthly and annual records (e.g. fuel use, continuous emissions monitoring, operating hours) to determine whether NOx emissions from such premises in any calendar year are in excess of twenty-five (25) tons for a premises located in a severe nonattainment area for ozone or fifty (50) tons for a premises located in a serious nonattainment area for ozone; [RCSA §22a-174-22(l)(1)(C)] b. Records of all tune-ups, repairs, replacement of parts and other maintenance; [RCSA §22a-174-22(l)(1)(D)] c. Copies of all documents submitted to the Commissioner pursuant to this section; [RCSA §22a-174-22(l)(1)(E)] d. Procedures for calculating NOx emission rates in (B) and (C) above; [RCSA §22a-174-22(l)(1)(G)] e. Records of the dates, times and places of all emission testing required by this section, the persons performing the measurements, the testing methods used, the operating conditions at the time of testing, and the results of such testing. [RCSA §22a-174-22(l)(1)(H)]

Table III.A: EMISSION UNITS GEMU-001 & 2	
Pollutants or Process Parameters	**Compliance Demonstration Requirements**
4. NOx, continued	iii. Reporting Requirements The permittee of any source subject to RCSA §22a-174-22 shall submit a report on NOx emissions from such source, on a form provided by the Commissioner, on or before April 15 of each year. [RCSA §22a-174-22(l)(6)]

Section III: Applicable Requirements and Compliance Demonstration

Table III.A: EMISSION UNITS GEMU-001 & 2	
Pollutants or Process Parameters	**Compliance Demonstration Requirements**
5. Trading Agreement	Limitations or Restrictions The permittee owns and operates four (4) #6 oil fired boilers. The 4 boilers are subject to Section 22a-174-22 of the Regulations of Connecticut State Agencies, pertaining to control of NOx emissions. [Trading Agreement and Order 8134 Section A.2] On and after May 31, 1995, Section 22a-174-22(e) of the Regulations requires that the 4 boilers emit NOx at rates no greater than the RACT rate. The permittee proposes to use approved DERCs for compliance purposes when operating the 4 boilers on fuels that exceed the RACT rate. [Trading Agreement and Order 8134 Section A.4] The Commissioner, in accordance with the provisions of this Trading Agreement and Order No. 8134, and pursuant to Section 22a-174-22(j) of the Regulations, hereby allows P&W to comply with Section 22a-174-22 of the Regulations through use of DERC trading referenced in Section A herein, to achieve the NOx emission reduction required by Section 22a-174-22(d)(1) of the Regulations. [Trading Agreement and Order 8134 Section B] The permittee shall have in its possession approved DERCs each month. [Trading Agreement and Order 8134 Section C.1] Prior to May 1, 2003, the permittee shall comply during operation with the enforceable maximum FLERs of 0.35 lb/MMBtu (boilers 1, 2 &3) and 0.40 lb/MMBtu (boiler 4), averaged on a 24-hour basis. [Trading Agreement and Order 8134 Section C.2] No later than May 1, 2003, the permittee shall comply with the requirements of Section 22a-174-22(d)(1) of the Regulations. However, after full program review of this and other Trading Agreements and Orders and, if determined to be appropriate, the Commissioner may grant a written extension of this Trading Agreement and Order. [Trading Agreement and Order 8134 Section C.3] i. Monitoring and Testing Requirements The permittee shall monitor the amounts of all fuel use for the 4 boilers and the approved DERCs required to comply with Section 22a-174-22 of the Regulations. [Trading Agreement and Order 8134 Section C] ii. Record Keeping Requirements The permittee shall make and keep records for Trading Agreement and Order No. 8134 after May 31, 1995 and until May 1, 2003, as described below. [Trading Agreement and Order 8134 Section C]

Table III.A: EMISSION UNITS GEMU-001 & 2	
Pollutants or Process Parameters	**Compliance Demonstration Requirements**
5. Trading Agreement, continued	ii. Record Keeping Requirements, continued The permittee shall document that sufficient approved DERCs are available for the 4 boilers no later than the first of each calendar month to assure compliance for, at a minimum, that calendar month. [Trading Agreement and Order 8134 Section C.1.a.] The permittee shall, no later than the tenth day of each month, calculate DERCs used in the preceding calendar month for each engine, as follows: [Trading Agreement and Order 8134 Section C.1.b.] Engine DERCs (tons) = [(Hours of Operation x FLER in lb/hr) – (fuel use in MMBtu x (0.95 x RACT rate in lb/MMBtu))] / 2000 lb/ton Where: RACT rate = RACT rate of 0.25 lb/MMBtu FLER = full load emission rate of 0.35 lb/MMBtu (boilers 1, 2 &3) and 0.40 lb/MMBtu (boiler 4) Discount = 5% design margin applied to the RACT rate The permittee shall document and record monthly consumption of fuel and DERCs. [Trading Agreement and Order 8134 Section C.1.c.] The permittee shall maintain documentation to attest to the fact that DERCs used during the ozone season were generated during the ozone season. The ozone season is from May 1 through September 30 in any calendar year. Generator certification of this fact shall be sufficient. [Trading Agreement and Order 8134 Section C.1.f.] iii. Reporting Requirements The permittee shall, no later than March 1, of each year that Trading Agreement and Order No. 8134 is in effect, include with its annual emissions statement report to the Commissioner, the monthly rate of fuel consumption for each boiler and DERCs used by each boiler for the previous calendar year. [Trading Agreement and Order 8134 Section C.1.d.]

Section III: Applicable Requirements and Compliance Demonstration

B. EMISSION UNITS GEMU-003

Table III.B: EMISSION UNITS GEMU-003	
Pollutants or Process Parameters	**Compliance Demonstration Requirements**
1. Fuel Consumption	Limitations or Restrictions The maximum fuel consumption over any consecutive 12 month period for Inlet Air Heater #2 is 101,712 gallons of Jet A fuel and 114,720 gallons of Propane. [OP 104-0028 Part I.4] The maximum fuel consumption over any consecutive 12 month period for Inlet Air Heater #3 is 101,712 gallons of Jet A fuel and 114,720 gallons of Propane. [OP 104-0029 Part I.4] i. Monitoring and Testing Requirements The permittee shall monitor the fuel consumption for the Inlet Air Heaters #2 and #3, using a fuel metering device, when fuel is supplied by more than one tank or if multiple sources are supplied fuel by one tank. [OP 104-0028 & 29 Part IV.2] Otherwise, a manual inventory reconciliation method shall be used to monitor the fuel consumption. [RCSA §22a-174-33(j)(1)(K)(ii)] ii. Record Keeping Requirements The permittee shall make and keep records of the fuel consumption of the fuels burned in Inlet Air Heaters #2 and #3. The consecutive twelve month fuel usage shall be calculated each calendar month by adding the current month's fuel usage to that of the previous eleven months. The permittee shall record these figures monthly. [OP 104-0028 & 29 Part IV.1]

Table III.B: EMISSION UNITS GEMU-003	
Pollutants or Process Parameters	**Compliance Demonstration Requirements**
2. Sulfur Content	Limitations or Restrictions The Jet A fuel Sulfur content (% by weight, dry basis) for Inlet Air Heater #2 is limited to 0.1%. [OP 104-0028 Part I.5] The Jet A fuel Sulfur content (% by weight, dry basis) for Inlet Air Heater #3 is limited to 0.1%. [OP 104-0029 Part I.5] i. Monitoring and Testing Requirements The permittee shall monitor the sulfur content of the Jet A fuel burned in Inlet Air Heaters #2 & 3, using either a fuel certification for a delivery of fuel from a bulk petroleum provider or a copy of a current contract with the fuel supplier supplying the fuel used by the equipment that includes the applicable sulfur content or grade of the fuel as a condition of each shipment or by sampling after each transfer/shipment to the large bulk storage tanks. [RCSA §22a-174-33(j)(1)(K)(ii)] ii. Record Keeping Requirements The permittee shall make and keep records of the sulfur content of the fuel burned in Inlet Air Heaters #2 & 3. Records for a fuel certification and sampling shall include the following information: the date of delivery, the name of the fuel supplier, type of fuel delivered, the percentage of sulfur in such fuel, by weight, dry basis, and the method used to determine the sulfur content of such fuel. Records for a current contract shall include the following information: the name of the fuel supplier and type or grade of fuel delivered. [OP 104-0028 & 29 Part IV.3]

Section III: Applicable Requirements and Compliance Demonstration

Table III.B: EMISSION UNITS GEMU-003	
Pollutants or Process Parameters	**Compliance Demonstration Requirements**
3. Hours of Operation	Limitations or Restrictions The maximum hours of operation for Inlet Air Heater #1 is 20 hours per day and 5,000 hours per year. [OP 104-0005] The maximum daily hours of operation for Inlet Air Heater #2 is 14 hours per day. [OP 104-0028 Part I.6] The maximum daily hours of operation for Inlet Air Heater #3 is 14 hours per day. [OP 104-0029 Part I.6] i. Monitoring and Testing Requirements The permittee shall monitor the hours of operation of Inlet Air Heaters #1, #2 and #3 using log entries of the hours run each day. [RCSA §22a-174-33(j)(1)(K)(ii)] ii. Record Keeping Requirements The permittee shall make and keep records the hours of operation of Inlet Air Heaters #1, #2 and #3. Records shall include the name or clock number of the responsible individual, the date and the hours run each day. [RCSA §22a-174-4(c)(1)]

Section III: Applicable Requirements and Compliance Demonstration

Table III.B: EMISSION UNITS GEMU-003	
Pollutants or Process Parameters	**Compliance Demonstration Requirements**
4. NOx	Limitations or Restrictions For any stationary source for which there is no applicable emission limitation in Table 22-1 or in subparagraphs (A) through (F) of Section 22(e)(2), the owner or operator of such source shall not cause or allow emissions of NOx therefrom in excess of the following: seven hundred (700) ppmvd. [RCSA §22a-174-22(e)(2)(G)] i. Monitoring and Testing Requirements The permittee shall conduct an emission test at least once every five years for the three inlet air heaters to demonstrate compliance with RCSA §22a-174-22. [RCSA §22a-174-22(k)(1)] Testing shall be conducted in compliance with sampling and analytical procedures approved under 40 CFR Part 60, Appendix A, or under procedures in RCSA §22a-174-5(d). ii. Record Keeping Requirements The permittee shall make and keep the records for the three inlet air heaters as described below. a. Monthly and annual records (e.g. fuel use, continuous emissions monitoring, operating hours) to determine whether NOx emissions from such premises in any calendar year are in excess of twenty-five (25) tons for a premises located in a severe nonattainment area for ozone or fifty (50) tons for a premises located in a serious nonattainment area for ozone; [RCSA §22a-174-22(l)(1)(C)] b. Records of all tune-ups, repairs, replacement of parts and other maintenance; [RCSA §22a-174-22(l)(1)(D)] c. Copies of all documents submitted to the Commissioner pursuant to this section; [RCSA §22a-174-22(l)(1)(E)] d. Procedures for calculating NOx emission rates in (B) and (C) above; [RCSA §22a-174-22(l)(1)(G)] e. Records of the dates, times and places of all emission testing required by this section, the persons performing the measurements, the testing methods used, the operating conditions at the time of testing, and the results of such testing. [RCSA §22a-174-22(l)(1)(H)] iii. Reporting Requirements The permittee of any source subject to RCSA §22a-174-22 shall submit a report on NOx emissions from such source, on a form provided by the Commissioner, on or before April 15 of each year. [RCSA §22a-174-22(l)(6)]

Table III.B: EMISSION UNITS GEMU-003

Pollutants or Process Parameters	Compliance Demonstration Requirements
5. Allowable Emission Limits	Limitations or Restrictions The permittee shall not exceed the following emission limits for Inlet Air Heaters #2 and #3, based on fuel consumption and sulfur content limitations: [OP 104-0028 & 29 Part V]

Criteria Pollutants	Jet A lb/MMBTU	Propane lb/MMBTU	ASC* ($\mu g/m^3$)	TPY
PM-10	0.0074	0.00284		0.066
SOx	0.100	0.0002		0.688
NOx	0.148	0.208		2.107
VOC	0.00148	0.0055		0.039
CO	0.037	0.035		0.438
Pb	0.0000089		2.49	0.001
Non-Criteria Pollutants				
Sulfuric Acid	0.0018		511.7	0.012

*allowable stack concentration

i. Monitoring and Testing Requirements

The permittee shall demonstrate compliance with the above emission limits for Inlet Air Heaters #2 and #3 using emission factors from the following sources: [CP/OP 104-0028 & 29 Part V]

a. PM-10, NOx, CO, VOC (for Jet A fuel): Compilation of Air Pollutant Emission Factors, AP-42, Fifth edition, Tables 1.3-2, 1.3-4 & 1.3-7, (SCC=10200502), pages 1.3-4, 1.3-7 & 1.3-10, January 1995.
b. SOx (for Jet A fuel): CTDEP emission factor of 135 S lb/1000 gal, where S is the maximum percent sulfur content by weight
c. Pb (for Jet A fuel): Compilation of Air Pollutant Emission Factors, AP-42, Fifth edition, Table 1.3-11, page 1.3-20, January 1995.
d. H_2SO_4 (for Jet A fuel): CTDEP emission factor of 2.45 S lb/1000 gal for liquid fuel, where S is the maximum percent sulfur content by weight.
e. PM-10, SOx, NOx, CO, VOC for Propane: Compilation of Air Pollutant Emission Factors, AP-42, Fifth edition, Table 1.5-2, (SCC=10201002), page 1.5-3, January 1995.

ii. Record Keeping Requirements

The permittee shall make and keep records of the emission calculations for Inlet Air Heaters #2 and #3. [RCSA §22a-174-4(c)(1)]

Section III: Applicable Requirements and Compliance Demonstration

C. EMISSION UNIT EMU-004

Table III.C: EMISSION UNIT EMU-004	
Pollutants or Process Parameters	**Compliance Demonstration Requirements**
1. Fuel Consumption	Limitations or Restrictions The maximum fuel consumption over any consecutive 12 month period for the FT-4 gas turbine drive engine is 1,257,777 gallons of Jet A fuel. [OP 104-0027 Part I.4] i. Monitoring and Testing Requirements The permittee shall monitor the fuel consumption for the FT-4 gas turbine drive engine, using a fuel metering device, when fuel is supplied by more than one tank or if multiple sources are supplied fuel by one tank. [OP 104-0027 Part IV.2] Otherwise, a manual inventory reconciliation method shall be used to monitor the fuel consumption. [RCSA §22a-174-33(j)(1)(K)(ii)] ii. Record Keeping Requirements The permittee shall make and keep records of the fuel consumption of the fuels burned in the FT-4 gas turbine drive engine. The consecutive twelve month fuel usage shall be calculated each calendar month by adding the current month's fuel usage to that of the previous eleven months. The permittee shall record these figures monthly. [OP 104-0027 Part IV.1]

Table III.C: EMISSION UNIT EMU-004	
Pollutants or Process Parameters	**Compliance Demonstration Requirements**
2. Sulfur Content	Limitations or Restrictions The Jet A fuel Sulfur content (% by weight, dry basis) for the FT-4 gas turbine drive engine is limited to 0.1%. [OP 104-0027 Part I.5] i. Monitoring and Testing Requirements The permittee shall monitor the sulfur content of the Jet A fuel burned in the FT-4 gas turbine drive engine, using either a fuel certification for a delivery of fuel from a bulk petroleum provider or a copy of a current contract with the fuel supplier supplying the fuel used by the equipment that includes the applicable sulfur content or grade of the fuel as a condition of each shipment or by sampling after each transfer/shipment to the large bulk storage tanks. [RCSA §22a-174-33(j)(1)(K)(ii)] ii. Record Keeping Requirements The permittee shall make and keep records of the sulfur content of the fuels burned in the FT-4 gas turbine drive engine. Records for a fuel certification and sampling shall include the following information: the date of delivery, the name of the fuel supplier, type of fuel delivered, the percentage of sulfur in such fuel, by weight, dry basis, and the method used to determine the sulfur content of such fuel. Records for a current contract shall include the following information: the name of the fuel supplier and type or grade of fuel delivered. [OP 104-0027 Part IV.3]

Section III: Applicable Requirements and Compliance Demonstration

Table III.C: EMISSION UNIT EMU-004	
Pollutants or Process Parameters	**Compliance Demonstration Requirements**
3. Hours of Operation	Limitations or Restrictions The maximum daily hours of operation for the FT-4 gas turbine drive engine is 14 hours per day. [OP 104-0027 Part I.6] i. Monitoring and Testing Requirements The permittee shall monitor the hours of operation of the FT-4 gas turbine drive engine using log entries of the hours run each day. [RCSA §22a-174-33(j)(1)(K)(ii)] ii. Record Keeping Requirements The permittee shall make and keep records of the hours of operation of the FT-4 gas turbine drive engine. Records shall include the name or clock number of the responsible individual, the date and the hours run each day. [RCSA §22a-174-4(c)(1)]

Table III.C: EMISSION UNIT EMU-004

Pollutants or Process Parameters	Compliance Demonstration Requirements
4. Allowable Emission Limits	Limitations or Restrictions The permittee shall not exceed the following annual emission limits for the FT-4 gas turbine drive engine, based on fuel consumption and sulfur content limitations: [OP 104-0027 Part V]

Criteria Pollutants	lb/MMBTU	ASC* ($\mu g/m^3$)	TPY
PM-10	0.089		7.56
SOx	0.100		8.49
NOx	0.674		57.22
VOC	0.005		0.41
CO	0.070		5.95
Pb	0.000058	12.7	0.005
Non-Criteria Pollutants			
Sulfuric Acid	0.0018	395.8	0.154

*allowable stack concentration

i. Monitoring and Testing Requirements

The permittee shall demonstrate compliance with the above emission limits for the FT-4 gas turbine drive engine using emission factors from the following sources: [CP/OP 104-0027 Part V]

a. PM-10, NOx: P&W engine test data., 1977.
b. SOx: CTDEP emission factor of 135 S lb/1000 gal, where S is the maximum percent sulfur content by weight
c. CO, VOC for P&W JT-4A Engine in Climb Out Mode: Compilation of Air Pollutant Emission Factors, AP-42, Second edition, Table 3.2-1-4, page 3.2-1-6, April 1973.
d. Pb: Compilation of Air Pollutant Emission Factors, AP-42, Fifth edition, Table 3.1-7, page 3.1-8, January 1995.
e. H_2SO_4: CTDEP emission factor of 2.45 S lb/1000 gal for liquid fuel, where S is the maximum percent sulfur content by weight.

ii. Record Keeping Requirements

The permittee shall make and keep records of the emission calculations for the FT-4 gas turbine drive engine. [RCSA §22a-174-4(c)(1)]

Section III: Applicable Requirements and Compliance Demonstration

D. EMISSION UNIT EMU-005

Table III.D: EMISSION UNIT EMU-005	
Pollutants or Process Parameters	**Compliance Demonstration Requirements**
1. Fuel Consumption	Limitations or Restrictions The Maximum Fuel Consumption over any consecutive twelve (12) month period for the testing of GG-8 stationary gas turbine engines is 259,609 gallons of jet A fuel. [OP 104-0062 Part I.2] i. Monitoring and Testing Requirements The permittee shall continuously monitor fuel consumption for the testing of GG-8 stationary gas turbine engines using a fuel metering device, when fuel is supplied by more than one tank or if multiple sources are supplied fuel by one tank. [OP 104-0062 Part IV.2.] ii. Record Keeping Requirements The permittee shall make and keep records of the fuel consumption for the testing of GG-8 stationary gas turbine engines. The consecutive twelve month fuel usage shall be calculated each calendar month by adding the current month's fuel usage to that of the previous eleven months. The permittee shall record these figures monthly. [OP 104-0062 Part IV.1.]

Table III.D: EMISSION UNIT EMU-005	
Pollutants or Process Parameters	**Compliance Demonstration Requirements**
2. Sulfur content of the liquid fuel	Limitations or Restrictions No person, except as provided in RCSA §22a-174-19(a)(2)(ii), (a)(3)(i), and (a)(3)(ii), shall use or burn fuel which contains sulfur in excess of a maximum of one percent (1.0%) by weight (dry basis). [RCSA §22a-174-19(a)(2)(i)] The Fuel Sulfur Content (% by weight, dry basis) for the testing of GG-8 stationary gas turbine engines is limited to 0.2% for jet A fuel. [OP 104-0062 Part I.3] i. Monitoring and Testing Requirements The permittee shall monitor the sulfur content of all liquid fuels being fired in the GG-8 stationary gas turbine, using either a fuel certification for a delivery of fuel from a bulk petroleum provider or a copy of a current contract with the fuel supplier supplying the fuel used by the equipment that includes the applicable sulfur content of the fuel as a condition of each shipment or by sampling after each transfer/shipment to the large bulk storage tanks. [OP 104-0062 Part IV.3] ii. Record Keeping Requirements The permittee shall make and keep records of the sulfur content of the liquid fuels transferred/shipped to the bulk storage tanks. Records for a fuel certification and sampling shall include the following information: the date of delivery, the name of the fuel supplier, type of fuel delivered, the percentage of sulfur in such fuel, by weight, dry basis, and the method used to determine the sulfur content of such fuel. Records for a current contract shall include the following information: the name of the fuel supplier and type or grade of fuel delivered. [RCSA §22a-174-33(j)(1)(K)(ii)]

Section III: Applicable Requirements and Compliance Demonstration

Table III.D: EMISSION UNIT EMU-005

Pollutants or Process Parameters	Compliance Demonstration Requirements
3. Allowable Emission Limits	Limitations or Restrictions The permittee shall not exceed the following annual emission limits for the GG-8 stationary gas turbine engines, based on fuel consumption and sulfur content limitations.[OP 104-0062 Part VI] Criteria Pollutants — lb/hr — TPY PM-10 — 15.2 — 1.037 SOx — 51.4 — 3.505 NOx — 230 — 15.7 VOC — 12 — 0.819 CO — 32 — 2.184 Pb — 0.01444 — 0.001 Non-Criteria Pollutants — MASC * ($\mu g/m^3$) Sulfuric Acid — 112 — 0.064 * Maximum allowable stack concentration i. Monitoring and Testing Requirements The permittee shall demonstrate compliance with the above emission limits for the GG-8 stationary gas turbine engines using emission factors from the following sources: .[OP 104-0062 Part VI] a. PM-10: Compilation of Air Pollutant Emission Factors, AP-42, Fifth edition, Table 3.1-2, page 3.1-4, January 1995. b. SOx: CTDEP emission factor of 135 S lb/gal for Jet fuel, where S is the maximum percent sulfur content by weight. c. NOx, VOC, CO: P&W emission test data for GG-8 turbines. d. Pb: Compilation of Air Pollutant Emission Factors, AP-42, Fifth edition, Table 3.1-7, page 3.1-8, January 1995. e. H_2SO_4: CTDEP emission factor of 2.45 S lb/1000 gal for liquid fuel, where S is the maximum percent sulfur content by weight. ii. Record Keeping Requirements The permittee shall make and keep records of the emission calculations for the GG-8 stationary gas turbine engines. [RCSA §22a-174-4(c)(1)]

Table III.D: EMISSION UNIT EMU-005	
Pollutants or Process Parameters	**Compliance Demonstration Requirements**
4. NOx	Limitations or Restrictions For Engines Not Covered by Trading Order 8134 or Schedule Modification Order 8098: The owner or operator of a stationary source subject to RCSA §22a-174-22 may, in accordance with subsection (d)(1)(A) of this section, comply with the requirements of this section by meeting applicable emission limitations specified in Table 22-1 of this section. Emission limitations in Table 22-1 for turbine engines that are quantified in units of ppmvd shall be corrected to fifteen percent (15%) oxygen. [RCSA §22a-174-22(e)(1)] For a turbine engine with MRC $\geq$ 100 MMBTU the NOx limitation is 55 ppmvd when firing natural gas and 75 ppmvd when firing other oil. [RCSA §22a-174-22(e) Table 22-1] i. Monitoring and Testing Requirements The permittee shall conduct an emission test at least once every five years for the production GG-8 gas turbine engines not covered by Trading Agreement and Order 8134 to demonstrate compliance with RCSA §22a-174-22. [RCSA §22a-174-22(k)(1)] Testing shall be conducted in compliance with sampling and analytical procedures approved under 40 CFR Part 60, Appendix A, or under procedures in RCSA §22a-174-5(d). On May 1, 1997, Pratt & Whitney submitted a Request for Variance to the NOx RACT Stack Testing requirement for the production GG-8 gas turbine engine (OP 104-0062) as provided under RCSA §22a-174-13. Pratt & Whitney maintains that the testing of these sources at all Pratt & Whitney locations is not economically and technologically feasible or beneficial to the environment. Production GG-8 gas turbine engines are either included in the Trading Agreement and Order 8134 or are compliant. [Trading Agreement and Order 8134]

Table III.D: EMISSION UNIT EMU-005	
Pollutants or Process Parameters	**Compliance Demonstration Requirements**
4. NOx, continued	ii. Record Keeping Requirements The permittee shall make and keep the records from the testing of production GG-8 gas turbine engines as described below. a. Monthly and annual records (e.g. fuel use, continuous emissions monitoring, operating hours) to determine whether NOx emissions from such premises in any calendar year are in excess of twenty-five (25) tons for a premises located in a severe nonattainment area for ozone or fifty (50) tons for a premises located in a serious nonattainment area for ozone; [RCSA §22a-174-22(l)(1)(C)] b. Records of all tune-ups, repairs, replacement of parts and other maintenance; [RCSA §22a-174-22(l)(1)(D)] c. Copies of all documents submitted to the Commissioner pursuant to this section; [RCSA §22a-174-22(l)(1)(E)] d. Procedures for calculating NOx emission rates in (B) and (C) above; [RCSA §22a-174-22(l)(1)(G)] e. Records of the dates, times and places of all emission testing required by this section, the persons performing the measurements, the testing methods used, the operating conditions at the time of testing, and the results of such testing. [RCSA §22a-174-22(l)(1)(H)] iii. Reporting Requirements The permittee of any source subject to RCSA §22a-174-22 shall submit a report on NOx emissions from such source, on a form provided by the Commissioner, on or before April 15 of each year. [RCSA §22a-174-22(l)(6)]

Section III: Applicable Requirements and Compliance Demonstration

Table III.D: EMISSION UNIT EMU-005	
Pollutants or Process Parameters	**Compliance Demonstration Requirements**
5. Trading Agreement	Limitations or Restrictions The permittee owns and operates a production GG-8 gas turbine engine (OP 104-0062), capable of burning jet fuel. The engine is subject to Section 22a-174-22 of the Regulations of Connecticut State Agencies, pertaining to control of NOx emissions. [Trading Agreement and Order 8134 Section A.2] On and after May 31, 1995, Section 22a-174-22(e) of the Regulations requires that the production engine emit NOx at rates no greater than the RACT rate. The permittee proposes to use approved DERCs for compliance purposes when operating the engine on fuels that exceed the RACT rate. [Trading Agreement and Order 8134 Section A.4] The Commissioner, in accordance with the provisions of this Trading Agreement and Order No. 8134, and pursuant to Section 22a-174-22(j) of the Regulations, hereby allows P&W to comply with Section 22a-174-22 of the Regulations through use of DERC trading referenced in Section A herein, to achieve the NOx emission reduction required by Section 22a-174-22(d)(1) of the Regulations. [Trading Agreement and Order 8134 Section B] The permittee shall have in its possession approved DERCs each month. [Trading Agreement and Order 8134 Section C.1] Prior to May 1, 2003, the permittee shall comply during operation with the enforceable maximum FLERs of 230 lb/hr, averaged on a 24-hour basis. [Trading Agreement and Order 8134 Section C.2] No later than May 1, 2003, the permittee shall comply with the requirements of Section 22a-174-22(d)(1) of the Regulations. However, after full program review of this and other Trading Agreements and Orders and, if determined to be appropriate, the Commissioner may grant a written extension of this Trading Agreement and Order. [Trading Agreement and Order 8134 Section C.3] i. Monitoring and Testing Requirements The permittee shall monitor the amounts of all fuel use for the production GG-8 gas turbine engine and the approved DERCs required to comply with Section 22a-174-22 of the Regulations. [Trading Agreement and Order 8134 Section C] ii. Record Keeping Requirements The permittee shall make and keep records for Trading Agreement and Order No. 8134 after May 31, 1995 and until May 1, 2003, as described below. [Trading Agreement and Order 8134 Section C]

Table III.D: EMISSION UNIT EMU-005	
Pollutants or Process Parameters	**Compliance Demonstration Requirements**
5. Trading Agreement, continued	ii. Record Keeping Requirements, continued The permittee shall document that sufficient approved DERCs are available for the engine no later than the first of each calendar month to assure compliance for, at a minimum, that calendar month. [Trading Agreement and Order 8134 Section C.1.a.] The permittee shall, no later than the tenth day of each month, calculate DERCs used in the preceding calendar month for each engine, as follows: [Trading Agreement and Order 8134 Section C.1.b.] Engine DERCs (tons) = [(Hours of Operation x FLER in lb/hr) – (fuel use in MMBtu x (0.95 x RACT rate in lb/MMBtu))] / 2000 lb/ton Where: RACT rate = RACT rate of 0.292 lb/MMBtu FLER = full load emission rate of 230 lb/hr Discount = 5% design margin applied to the RACT rate The permittee shall document and record monthly consumption of fuel and DERCs. [Trading Agreement and Order 8134 Section C.1.c.] The permittee shall maintain documentation to attest to the fact that DERCs used during the ozone season were generated during the ozone season. The ozone season is from May 1 through September 30 in any calendar year. Generator certification of this fact shall be sufficient. [Trading Agreement and Order 8134 Section C.1.f.] iii. Reporting Requirements The permittee shall, no later than March 1, of each year that Trading Agreement and Order No. 8134 is in effect, include with its annual emissions statement report to the Commissioner, the monthly rate of fuel consumption for each engine and DERCs used by each engine for the previous calendar year. [Trading Agreement and Order 8134 Section C.1.d.]

Section III: Applicable Requirements and Compliance Demonstration

E. EMISSION UNIT EMU-006

Table III.E: EMISSION UNIT EMU-006	
Pollutants or Process Parameters	**Compliance Demonstration Requirements**
1. Fuel Consumption	Limitations or Restrictions The maximum fuel consumption over any consecutive 12 month period for Experimental Aircraft Engine Combustion Rig X960 is 294,502 gallons of aviation fuel or 36 MMCF of natural gas, where 1 MMCF of natural gas may be substituted for each 8180.6 gallons of aviation fuel. [OP 104-0030 Part I.4] i. Monitoring and Testing Requirements The permittee shall monitor the fuel consumption for the Experimental Aircraft Engine Combustion Rig X960, using a fuel metering device, when fuel is supplied by more than one tank or if multiple sources are supplied fuel by one tank. [OP 104-0030 Part IV.2] Otherwise, a manual inventory reconciliation method shall be used to monitor the fuel consumption. [RCSA §22a-174-33(j)(1)(K)(ii)] ii. Record Keeping Requirements The permittee shall make and keep records of the fuel consumption of the fuels burned in the Experimental Aircraft Engine Combustion Rig X960. The consecutive twelve month fuel usage shall be calculated each calendar month by adding the current month's fuel usage to that of the previous eleven months. The permittee shall record these figures monthly. [OP 104-0030 Part IV.1]

Table III.E: EMISSION UNIT EMU-006	
Pollutants or Process Parameters	**Compliance Demonstration Requirements**
2. Sulfur Content	Limitations or Restrictions The Jet A fuel Sulfur content (% by weight, dry basis) for Experimental Aircraft Engine Combustion Rig X960 is limited to 0.1%. [OP 104-0030 Part I.5] i. Monitoring and Testing Requirements The permittee shall monitor the sulfur content of the Jet A fuel burned in Experimental Aircraft Engine Combustion Rig X960, using either a fuel certification for a delivery of fuel from a bulk petroleum provider or a copy of a current contract with the fuel supplier supplying the fuel used by the equipment that includes the applicable sulfur content or grade of the fuel as a condition of each shipment or by sampling after each transfer/shipment to the large bulk storage tanks. [RCSA §22a-174-33(j)(1)(K)(ii)] ii. Record Keeping Requirements The permittee shall make and keep records of the sulfur content of the fuels burned in the Experimental Aircraft Engine Combustion Rig X960. Records for a fuel certification and sampling shall include the following information: the date of delivery, the name of the fuel supplier, type of fuel delivered, the percentage of sulfur in such fuel, by weight, dry basis, and the method used to determine the sulfur content of such fuel. Records for a current contract shall include the following information: the name of the fuel supplier and type or grade of fuel delivered. [OP 104-0030 Part IV.3]

Section III: Applicable Requirements and Compliance Demonstration

Table III.E: EMISSION UNIT EMU-006	
Pollutants or Process Parameters	**Compliance Demonstration Requirements**
3. Hours of Operation	Limitations or Restrictions The maximum daily hours of operation for Experimental Aircraft Engine Combustion Rig X960 is 14 hours per day. [OP 104-0030 Part I.6] i. Monitoring and Testing Requirements The permittee shall monitor the hours of operation of Experimental Aircraft Engine Combustion Rig X960 using log entries of the hours run each day. [RCSA §22a-174-33(j)(1)(K)(ii)] ii. Record Keeping Requirements The permittee shall make and keep records of the hours of operation of Experimental Aircraft Engine Combustion Rig X960. Records shall include the name or clock number of the responsible individual, the date and the hours run each day. [RCSA §22a-174-4(c)(1)]

Table III.E: EMISSION UNIT EMU-006

Pollutants or Process Parameters	Compliance Demonstration Requirements
4. Allowable Emission Limits	Limitations or Restrictions The permittee shall not exceed the following annual emission limits for Experimental Aircraft Engine Combustion Rig X960, based on fuel consumption and sulfur content limitations: [OP 104-0030 Part V]

Criteria Pollutants	Av. Fuel lb/MMBTU	Nat. Gas lb/MMBTU	ASC* ($\mu g/m^3$)	TPY
PM-10	0.006	0.042		0.754
SOx	0.100	0.0006		1.988
NOx	0.889	0.44		17.67
VOC	0.104	0.091		2.062
CO	0.148	0.317		5.706
Pb	0.000058		17.9	0.001
Non-Criteria Pollutants				
Sulfuric Acid	0.0018		560.7	0.036

*allowable stack concentration

i. Monitoring and Testing Requirements

The permittee shall demonstrate compliance with the above emission limits for Experimental Aircraft Engine Combustion Rig X960 using emission factors from the following sources: [CP/OP 104-0030 Part V]

a. PM-10, NOx, VOC, CO (for aviation fuel): P&W average engine test data. 2/15/96.
b. SOx (for aviation fuel): CTDEP emission factor of 135 S lb/1000 gal, where S is the maximum percent sulfur content by weight
c. Pb (for aviation fuel): Compilation of Air Pollutant Emission Factors, AP-42, Fifth edition, Table 3.1-7, page 3.1-8, January 1995.
d. H_2SO_4 (for aviation fuel): CTDEP emission factor of 2.45 S lb/1000 gal for liquid fuel, where S is the maximum percent sulfur content by weight.
e. PM-10, SOx, NOx (for natural gas): Compilation of Air Pollutant Emission Factors, AP-42, Fifth edition, Table 3.1-2, page 3.1-4, January 1995.
f. VOC, CO for natural gas: P&W average engine test data 3/13/96

ii. Record Keeping Requirements

The permittee shall make and keep records of the emission calculations for Experimental Aircraft Engine Combustion Rig X960. [RCSA §22a-174-4(c)(1)]

Section III: Applicable Requirements and Compliance Demonstration

F. EMISSION UNITS EMU-004, 5, 6

Table III.F: EMISSION UNITS EMU-004, 5, 6

Pollutants or Process Parameters	Compliance Demonstration Requirements
1. NOx, Schedule Modification	Limitations or Restrictions If the owner or operator of a source proves to the satisfaction of the Commissioner that it is not technologically or economically feasible for such source to comply with the emission limitations in subsections (e) through (g) of this section, the Commissioner may by permit require NOx emission reductions through modifications of the schedule of NOx-emitting activities and implementation of other measures to reduce NOx emissions at such source. Such permit may include restrictions to operations on any day for which the Commissioner has forecast that ozone levels will be "moderate to unhealthful", "unhealthful" or "very unhealthful." [RCSA §22a-174-22(i)(1)] This subsection shall apply to the following [RCSA §22a-174-22(i)(2)]: a. Oil-fired turbine engines or fast-response double-furnace Naval boilers that generate power to create simulated high-altitude atmospheres for the testing of aircraft engines; b. Testing of fuel-burning equipment undergoing research and development; or c. Compression-ignition reciprocating engines used exclusively for the training personnel in the operation and maintenance of such engines aboard submarines. The permittee shall comply with Consent Order No. 8098 for Schedule Modification. [Consent Order 8098] i. Monitoring and Testing Requirements The permittee shall monitor the predicted ozone level by obtaining the predicted ozone forecast by calling the Commissioner at (860) 424-6167 or an alternative telephone number specified by the Commissioner after 3 P.M. and listening to the recorded message. [Consent Order 8098 Paragraph B.1.a]

Table III.F: EMISSION UNITS EMU-004, 5, 6	
Pollutants or Process Parameters	**Compliance Demonstration Requirements**
1. NOx, Schedule Modification, continued	ii. Record Keeping Requirements The permittee shall maintain a log during the ozone season of those days that the subject equipment is operated, fuel use by the subject equipment on those days, and the ozone level predicted for those days. [Consent Order 8098 Paragraph B.1.e] The permittee shall make and keep the records described below. [RCSA §22a-174-22(l)] a. Monthly and annual records (e.g. fuel use, continuous emissions monitoring, operating hours); b. Records of all tune-ups, repairs, replacement of parts and other maintenance; c. Copies of all documents submitted to the Commissioner pursuant to RCSA §22a-174-22; d. Procedures for calculating NOx emission rates. iii. Reporting Requirements On or before December 31 of each year following issuance of Consent Order 8098, the permittee shall submit copies of the log for the previous ozone season to the Commissioner. [Consent Order 8098 Paragraph B.1.e] On or before April 15 of each year, the permittee of any source subject to RCSA §22a-174-22 shall submit a report on NOx emissions from such source, on a form provided by the Commissioner. [RCSA §22a-174-22(l)(6)]

Section III: Applicable Requirements and Compliance Demonstration

G. EMISSION UNITS GEMU-007

Table III.G EMISSION UNITS GEMU-007	
Pollutants or Process Parameters	**Compliance Demonstration Requirements**
1. Fuel Consumption	Limitations or Restrictions The maximum fuel consumption over any consecutive 12 month period for the Cummins #NTA495G2 emergency diesel generator is 1,380 gallons of diesel fuel. [CP/OP 104-0077 Part I.4] The maximum fuel consumption over any consecutive 12 month period for the Onan #150DGFA emergency diesel generator is 1,360 gallons of diesel fuel. [CP/OP 104-0078 Part I.4] The maximum fuel consumption over any consecutive 12 month period for the Cummins #6BT5.9G2 emergency diesel generator is 1,580 gallons of diesel fuel. [CP/OP 104-0080 Part I.4] i. Monitoring and Testing Requirements The permittee shall monitor the fuel consumption for each of the 3 diesel generators using a fuel metering device, when fuel is supplied by more than one tank or if multiple sources are supplied fuel by one tank. [CP/OP 104-0077, 78, 80 Part IV.2.] Otherwise, a manual inventory reconciliation method shall be used to monitor the fuel consumption. [RCSA §22a-174-33(j)(1)(K)(ii)] ii. Record Keeping Requirements The permittee shall make and keep records of the monthly and annual diesel oil usage, in thousand gallons (MGal), for the 3 diesel generators. The consecutive twelve month fuel usage shall be calculated each calendar month by adding the current month's fuel usage to that of the previous eleven months. The permittee shall record these figures monthly. [CP/OP 104-0077, 78, 80 Part IV.1.]

Table III.G: EMISSION UNITS GEMU-007	
Pollutants or Process Parameters	**Compliance Demonstration Requirements**
2. Sulfur Content	Limitations or Restrictions The diesel fuel Sulfur content (% by weight, dry basis) for the Cummins #NTA495G2 emergency diesel generator is limited to 0.3%. [OP 104-0077 Part I.5] The diesel fuel Sulfur content (% by weight, dry basis) for the Onan #150DGFA emergency diesel generator is limited to 0.3%. [OP 104-0078 Part I.5] The diesel fuel Sulfur content (% by weight, dry basis) for the Cummins #6BT5.9G2 emergency diesel generator is limited to 0.3%. [OP 104-0080 Part I.5] i. Monitoring and Testing Requirements The permittee shall monitor the sulfur content of the diesel fuel burned in the 3 diesel generators, using either a fuel certification for a delivery of fuel from a bulk petroleum provider or a copy of a current contract with the fuel supplier supplying the fuel used by the equipment or a copy of a receipt from a local gasoline station. [RCSA §22a-174-33(j)(1)(K)(ii)] ii. Record Keeping Requirements The permittee shall make and keep records of the sulfur content of the fuels burned in the 3 diesel generators. Records for a fuel certification shall include the following information: the date of delivery, the name of the fuel supplier and type of fuel delivered. Records for a current contract shall include the following information: the name of the fuel supplier and type or grade of fuel to be delivered. Records from a local gasoline station shall include the name of the gasoline station and the type of fuel purchased. [CP/OP 104-0077, 78, 80 Part IV.3]

Table III.G: EMISSION UNITS GEMU-007

Pollutants or Process Parameters	Compliance Demonstration Requirements
3. Allowable Emission Limits	Limitations or Restrictions The permittee shall not exceed the following emission limits for the Cummins #NTA495G2 emergency diesel generator, based on fuel consumption and sulfur content limitations: [CP/OP 104-0077 Part VI]

Criteria Pollutants	lb/MMBTU	ASC* ($\mu g/m^3$)	TPY
PM-10	0.076		0.007
SOx	0.309		0.029
NOx	3.100		0.293
VOC	0.100		0.009
CO	0.810		0.077

Non-Criteria Pollutants		
Sulfuric Acid		1054

The permittee shall not exceed the following emission limits for the Onan #150DGFA emergency diesel generator, based on fuel consumption and sulfur content limitations: [CP/OP 104-0078 Part VI]

Criteria Pollutants	lb/MMBTU	ASC* ($\mu g/m^3$)	TPY
PM-10	0.081		0.008
SOx	0.309		0.029
NOx	3.100		0.288
VOC	0.100		0.009
CO	0.810		0.075

Non-Criteria Pollutants		
Sulfuric Acid		1762

*allowable stack concentration

Table III.G: EMISSION UNITS GEMU-007

Pollutants or Process Parameters	Compliance Demonstration Requirements
3. Allowable Emission Limits, continued	Limitations or Restrictions The permittee shall not exceed the following emission limits for the Cummins #6BT5.9G2 emergency diesel generator, based on fuel consumption and sulfur content limitations: [CP/OP 104-0080 Part VI]

Criteria Pollutants	lb/MMBTU	ASC* ($\mu g/m^3$)	TPY
PM-10	0.082		0.009
SOx	0.303		0.033
NOx	3.545		0.390
VOC	0.100		0.011
CO	1.091		0.120

Non-Criteria Pollutants	
Sulfuric Acid	1935.3

*allowable stack concentration

i. Monitoring and Testing Requirements

The permittee shall demonstrate compliance with the above emission limits for the Cummins #NTA495G2 and the Onan #150DGFA emergency diesel generators using emission factors from the following sources: [CP/OP 104-0077, 78 Part VI]

a. PM-10, NOx, VOC, CO: AP-42, fifth edition, Section 3.1, 7/93.
b. SOx: CTDEP emission factor of 135 S lb/1000 gal, where S is the maximum percent sulfur content by weight
c. H_2SO_4: CTDEP emission factor of 2.45 S lb/1000 gal for liquid fuel, where S is the maximum percent sulfur content by weight.

The permittee shall demonstrate compliance with the above emission limits for the Cummins #6BT5.9G2 emergency diesel generator using emission factors from the following sources: [CP/OP 104-0080 Part VI]

a. PM-10, NOx, VOC, CO: Manufacturer's data from the Cummins Engine Company.
b. SOx: CTDEP emission factor of 135 S lb/1000 gal, where S is the maximum percent sulfur content by weight
c. H_2SO_4: CTDEP emission factor of 2.45 S lb/1000 gal for liquid fuel, where S is the maximum percent sulfur content by weight.

ii. Record Keeping Requirements

The permittee shall make and keep records of the emission calculations for the 3 diesel generators. [RCSA §22a-174-4(c)(1)]

Section III: Applicable Requirements and Compliance Demonstration

H. EMISSION UNITS GEMU-011

Table III.H. EMISSION UNITS GEMU-011

Pollutants or Process Parameters	Compliance Demonstration Requirements
1. Allowable Emission Limits	Limitations or Restrictions The permittee shall not exceed the allowable VOC emission rates of 10 lb/hr, 10 lb/day and 1.83 tons/yr for the Devilbiss XWE-648, the BinksNPB-12-7-LH and the Devilbiss turboclean TL-1276 waterwash design spray booths. [CP/OP 104-0072, 73 & 74 Part A] The permittee shall not exceed the allowable TSP emission rates of 0.59 lb/hr, 0.59 lb/day and 0.11 tons/yr for the Devilbiss XWE-648, the BinksNPB-12-7-LH and the Devilbiss turboclean TL-1276 waterwash design spray booths: [CP/OP 104-0072, 73 & 74 Part A] i. Monitoring and Testing Requirements The permittee shall monitor the VOC emissions for the 3 spray booths through records of coating usage. [CP/OP 104-0072, 73 & 74] [RCSA §22a-174-33(j)(1)(K)(ii)] ii. Record Keeping Requirements The permittee shall make and keep records of the VOC emissions on a daily, monthly and yearly basis for the 3 spray booths. [CP/OP 104-0072, 73 & 74 Part F.1.] Records shall include the coating name, density, VOC content, content of each individual hazardous air pollutant, non-volatile content and the solids content. [CP/OP 104-0072, 73 & 74 Part F.2.] The permittee shall make daily calculations to show compliance with the pound per day limit. The consecutive twelve month VOC emissions shall be calculated each calendar month by adding the current month's VOC emissions to that of the previous eleven months. The permittee shall record these figures monthly. [CP/OP 104-0072, 73 & 74 Part F.] Proof of compliance with the 10 lb/day emission limit shall also be proof of compliance with the 10 lb/hr emission limit, since the worst case hourly emission rate would be if all pounds of VOC's emitted in one day were emitted in any one hour period. [CP/OP 104-0072, 73 & 74 Part E.]

Table III.H: EMISSION UNITSGEMU-011

Pollutants or Process Parameters	Compliance Demonstration Requirements
2. Hazardous Air Pollutants (HAPs)	Limitations or Restrictions The permittee shall ensure that the hazardous air pollutant emissions from this source comply with all applicable MASC limits under RCSA Section 22a-174-29, Tables 29-1, 29-2 and 29-3. A coating, solvent, thinner, or other compound used by this source, either for production or on a trial basis, which will emit a hazardous air pollutant may be utilized only if the permittee ensures that such emission complies with the applicable MASC. [CP/OP 104-0072, 73 & 74 Part G] Since PMC 1873 Skybond 703 Polyimide Resin has a potential to violate the MASC, the permittee shall restrict the use of PMC 1873 Skybond 703 Polyimide Resin as follows: The allowable range of paint to thinner ratios is 0.5:1 to 1.5:1. The allowable coating usage (gal/hr and gal/day) = (-0.36) X + 1.7, where X is the portion of paint in the paint to thinner ratio, from 0.5 to 1. [CP/OP 104-0072, 73 & 74 Part B] i. Monitoring and Testing Requirements The permittee shall calculate the actual stack concentration (ASC) and the maximum allowable stack concentration (MASC) of each hazardous air pollutant (HAP) listed in Tables 29-1, 29-2 and 29-3 of RCSA §22a-174-29 that is emitted by this source. The permittee shall demonstrate, by comparing the results from such calculations, that the ASC of each HAP does not exceed the appropriate MASC. [CP/OP 104-0072, 73 & 74 Part G.a.] The MASC shall be calculated using the following equation: MASC = 2815.23 (HLV) where: HLV = the applicable hazard limiting value found in Tables 29-1, 29-2 and 29-3 The ASC shall be calculated using the HAP's content in the material as applied (1b/gal) and the maximum consumption rate (gal/hr) as a worst case. This gives actual stack emissions in lb/hr which can be converted to $\mu g/m^3$ using the following equation and the flow rate in acfm ($\mu g/m^3$ = [lb/hr x 453.6 x 10^6 µg/lb]/[acfm x 60 min/hr x 0.02832 m^3/ft^3]). ii. Record Keeping Requirements The permittee shall make and keep records of the ASC calculations that demonstrate compliance with the MASC for each HAP listed in RCSA §22a-174-29 Tables 29-1, 29-2 & 29-3 emitted by this source. [CP/OP 104-0072, 73 & 74 Part F.3.] iii. Reporting Requirements The permittee shall submit a report to the Commissioner of any changes in materials, which contain hazardous air pollutants (HAP) that are regulated under RCSA §22a-174-29 and a demonstration of compliance with the MASC within 30 days of such changes. [CP/OP 104-0072, 73 & 74 Part G.e.]

Section III: Applicable Requirements and Compliance Demonstration

I. EMISSION UNIT EMU-012

Table III.I. EMISSION UNIT EMU-012

Pollutants or Process Parameters	Compliance Demonstration Requirements
1. Coating Limitations	Limitations or Restrictions Type of Coatings Applied: Specialty coatings as defined by 40 CFR 63, Subpart GG and EPA Control Techniques Guideline: Control of Volatile Organic Compound Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations. [CP/OP 104-0126 Part II.A.1.] Maximum VOC Content of Specialty Coatings as Applied (excluding water and exempt VOCs): Not to exceed VOC content limits as defined in section B.3(a)(1) of EPA Control Techniques Guideline: Control of Volatile Organic Compound Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations. [CP/OP 104-0126 Part II.A.2.] Maximum Application Rate: 1.8 gal/hr [CP/OP 104-0126 Part II.A.3.] Type of Cleaners Used: All solvent cleaners used shall comply with 40 CFR 63.744 and section B.3(c) of the EPA Control Techniques Guideline: Control of Volatile Organic Compound Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations. [CP/OP 104-0126 Part II.A.4.] i. Monitoring and Testing Requirements The permittee shall monitor the coating usage for the spray booth through records of material purchases and inventory. [CP/OP 104-0126] [RCSA §22a-174-33(j)(1)(K)(ii)] ii. Record Keeping Requirements The permittee shall make and keep records of the coatings and cleaners used for the spray booth on an hourly, daily, monthly and yearly basis. Records shall include the date of application, method of coating application, name of coating or cleaner used, amount of each coating used, amount of VOC emitted (lb or ton), and amount of PM-10 emitted (lb or ton). [CP/OP 104-0126 Part III.A.2.] The permittee shall maintain records of all coatings (as applied) and cleaners used in this booth. Such records shall contain the following information along with records required by 40 CFR 63.753 and section B.4 of the EPA Control Techniques Guideline: Control of Volatile Organic Compound Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations: [CP/OP 104-0126 Part III.A.1.] (a) A current list of coatings in use with category and VOC content less water and less exempt VOC as applied; (b) A current list of cleaners in use with VOC content less water and less exempt VOC as applied; (c) Solids content as applied.

Section III: Applicable Requirements and Compliance Demonstration

Table III.I. EMISSION UNIT EMU-012	
Pollutants or Process Parameters	**Compliance Demonstration Requirements**
2. Allowable Emission Limits	Limitations or Restrictions The permittee shall not exceed the allowable VOC emission rates of 7.17 lb/hr and 4.14 tons/yr for the surface coating operation. [CP/OP 104-0126 Part II.C.] The permittee shall not exceed the allowable TSP emission rates of 0.13 lb/hr and 0.01 tons/yr for the surface coating operation: [CP/OP 104-0126 Part II.C.] i. Monitoring and Testing Requirements The permittee shall monitor the VOC and PM-10 emissions for the surface coating operation through records of coating usage. [RCSA §22a-174-33(j)(1)(K)(ii)] ii. Record Keeping Requirements The permittee shall make and keep records of the VOC and PM-10 emissions on an hourly, daily, monthly and yearly basis for the surface coating operation. The consecutive twelve month VOC and PM-10 emissions shall be calculated each calendar month by adding the current month's VOC and PM-10 emissions to that of the previous eleven months. The permittee shall record these figures monthly. [CP/OP 104-0126 Part III.B.2]

Table III.I. EMISSION UNIT EMU-012

Pollutants or Process Parameters	Compliance Demonstration Requirements
3. Hazardous Air Pollutants (HAPs)	Limitations or Restrictions The permittee shall ensure that the hazardous air pollutant emissions from this source comply with all applicable MASC limits under RCSA Section 22a-174-29, Tables 29-1, 29-2 and 29-3. A coating, solvent, thinner, or other compound used by this source, either for production or on a trial basis, which will emit a hazardous air pollutant may be utilized only if the permittee ensures that such emission complies with the applicable MASC. [CP/OP 104-0126 Part III.B] i. Monitoring and Testing Requirements The permittee shall calculate the actual stack concentration (ASC) and the maximum allowable stack concentration (MASC) of each hazardous air pollutant (HAP) listed in Tables 29-1, 29-2 and 29-3 of RCSA §22a-174-29 that is emitted by this emission unit. The permittee shall demonstrate, by comparing the results from such calculations, that the ASC of each HAP does not exceed the appropriate MASC. [CP/OP 104-0126 Part III.B.1.] The MASC shall be calculated using the following equation: MASC = 1057 (HLV) where: HLV = the applicable hazard limiting value found in Tables 29-1, 29-2 and 29-3 The ASC shall be calculated using the HAP's content in the material as applied (1b/gal) and the maximum consumption rate (gal/hr) as a worst case. This gives actual stack emissions in lb/hr which can be converted to $\mu g/m^3$ using the following equation and the flow rate in acfm ($\mu g/m^3$ = [lb/hr x 453.6 x 10^6 µg/lb]/[acfm x 60 min/hr x 0.02832 m^3/ft^3]). ii. Record Keeping Requirements The permittee shall make and keep records of the ASC calculations that demonstrate compliance with the MASC for each HAP listed in RCSA §22a-174-29 Tables 29-1, 29-2 & 29-3 emitted by this source. [CP/OP 104-0126 Part III.B.1] iii. Reporting Requirements The permittee shall submit a report to the Commissioner of any changes in materials, which contain hazardous air pollutants (HAP) that are regulated under RCSA §22a-174-29 and a demonstration of compliance with the MASC within 30 days of such changes. [CP/OP 104-0126 Part III.B.4.]

Section III: Applicable Requirements and Compliance Demonstration

J. EMISSION UNITS GEMU-011, EMU-012, EMU-013

Table III.J. EMISSION UNITS GEMU-011, EMU-012, EMU-013

Pollutants or Process Parameters	Compliance Demonstration Requirements
1. Spray Gun Cleaning	Limitations or Restrictions Each owner or operator of a new or existing spray gun cleaning operation subject to this subpart in which spray guns are used for the application of coatings or any other materials that require the spray guns to be cleaned shall use one or more of the techniques, or their equivalent, specified in paragraphs (c)(1) through (c)(4) of this section. Spray gun cleaning operations using cleaning solvent solutions that contain HAP and VOC below the de minimis levels specified in §63.741(f) are exempt from the requirements in paragraphs (c)(1) through (c)(4) of this section. [40 CFR §63.744(c)] i. Monitoring and Testing Requirements The permittee shall monitor the solvents used for spray gun cleaning operations through records of material purchases and inventory. [RCSA §22a-174-33(j)(1)(K)(ii)] Each owner or operator using an enclosed spray gun cleaner under §63.744(c)(1) shall visually inspect the seals and all other potential sources of leaks associated with each enclosed gun spray cleaner system at least once per month. Each inspection shall occur while the system is in operation [40 CFR §63.751(a)] ii. Record Keeping Requirements The permittee shall make and keep records of the solvents used for spray gun cleaning operations. [40 CFR Part 63 Subpart GG] [RCSA §22a-174-33(j)(1)(K)(ii)] Each owner or operator of a new or existing cleaning operation subject to this subpart shall record the following information [40 CFR §63.752(b)]: (1) The name, vapor pressure, and documentation showing the organic HAP constituents of each cleaning solvent used for affected cleaning operations at the facility; (5) A record of all leaks from enclosed spray gun cleaners identified pursuant to §63.751(a) that includes for each leak found: (i) Source identification; (ii) Date leak was discovered; and (iii) Date leak was repaired.

Table III.J. EMISSION UNITS GEMU-011, EMU-012, EMU-013	
Pollutants or Process Parameters	**Compliance Demonstration Requirements**
1. Spray Gun Cleaning, continued	iii. Reporting Requirements Each owner or operator of a cleaning operation subject to this subpart shall submit the following information [40 CFR §63.753(b)]: (1) Semiannual reports occurring every 6 months from the date of notification of compliance status that identify: (iii) Any instance where a noncompliant spray gun cleaning method is used; (iv) Any instance where a leaking enclosed spray gun cleaner remains unrepaired and in use for more than 10 days; and (v) If the operations have been in compliance for the semiannual period, a statement that the cleaning operations have been in compliance with the applicable standards. Sources shall also submit a statement of compliance signed by a responsible company official certifying that the facility is in compliance with all applicable requirements.

Section III: Applicable Requirements and Compliance Demonstration

K. EMISSION UNITS GEMU-014

Table III.K. EMISSION UNITS GEMU-014

Pollutants or Process Parameters	Compliance Demonstration Requirements
1. Cold Cleaning Spray Operations	Limitations or Restrictions Each owner or operator of a new or existing cleaning operation subject to this subpart shall comply with the requirements in these paragraphs unless the cleaning solvent used is identified in Table 1 of this section or contains HAP and VOC below the de minimis levels specified in §63.741(f). [40 CFR §63.744(a)] (1) Place cleaning solvent-laden cloth, paper, or any other absorbent applicators used for cleaning in bags or other closed containers upon completing their use. Ensure that these bags and containers are kept closed at all times except when depositing or removing these materials from the container. Use bags and containers of such design so as to contain the vapors of the cleaning solvent. Cotton tipped swabs used for very small cleaning operations are exempt from this requirement. (2) Store fresh and spent cleaning solvents, except semi-aqueous solvent cleaners, used in aerospace cleaning operations in closed containers. (3) Conduct the handling and transfer of cleaning solvents to or from enclosed systems, vats, waste containers and other cleaning operation equipment that hold or store fresh or spent cleaning solvents in such a manner that minimizes spills. i. Monitoring and Testing Requirements The permittee shall monitor the solvents used for the flush cleaning spray operations through records of material purchases and inventory. [RCSA §22a-174-33(j)(1)(K)(ii)] ii. Record Keeping Requirements The permittee shall make and keep records of the amount of solvent added monthly to each cold cleaning unit. [RCSA §22a-174-20(l)(3)(K)] Each owner or operator of a new or existing cleaning operation subject to this subpart shall record the following information: the name, vapor pressure, and documentation showing the organic HAP constituents of each cleaning solvent used for affected cleaning operations at the facility. [40 CFR §63.752(b)(1)]

Section III: Applicable Requirements and Compliance Demonstration

L. PREMISES-WIDE GENERAL REQUIREMENTS

Table III.L. PREMISES-WIDE GENERAL REQUIREMENTS

Pollutants or Process Parameters	Applicable Regulatory References/Citations	Compliance Demonstration Requirements
Record Keeping Requirements	RCSA §22a-174-33(o)(2)	The permittee shall maintain and keep records of all required monitoring data and supporting information at the premises and make such records available for inspection and copying by the Commissioner at the premises, for at least five years from the date such data and information were obtained, in accordance with Section VII.F. of this permit and RCSA §22a-174-33(o)(2).
Reporting Requirements	RCSA §22a-174-33(o)(1) §22a-174-33(q)(1) §22a-174-33(q)(2)	i. The permittee shall submit to the commissioner written monitoring reports on January 30 and July 30 of each year in accordance with Section VII.E. of this permit and RCSA §22a-174-33(o)(1). ii. The permittee shall, on January 30 and July 30 of each year, submit to the commissioner, a progress report, regarding the permittee's progress in achieving compliance under the compliance schedule contained in this permit, in accordance with Section VII.G. of this permit and RCSA §22a-174-33(q)(1). iii. The permittee shall, on January 30 of each year, submit to the commissioner a written compliance certification in accordance with Section VII.H. of this permit and RCSA §22a-174-33(q)(2).
Emission Statements	RCSA §22a-174-4	The permittee shall submit annual emission inventory statements to the Commissioner in accordance with RCSA §22a-174-4(c)(1).

Table III.L. PREMISES-WIDE GENERAL REQUIREMENTS, continued

Pollutants or Process Parameters	Applicable Regulatory References/Citations	Compliance Demonstration Requirements
Smoke and Opacity Monitoring	RCSA §22a-174-4	The permittee shall comply with the procedures for smoke and opacity monitoring as specified in RCSA §22a-174-4.
Emission Testing	RCSA §22a-174-5	The permittee shall comply with the methods of sampling, emission testing, sample analysis, and reporting as specified in RCSA §22a-174-5.
Emergency Episode Procedures	RCSA §22a-174-6	The permittee shall comply with the procedures for emergency episodes as specified in RCSA §22a-174-6.
Malfunctions	RCSA §22a-174-7	The permittee shall comply with the procedures for malfunction of control equipment as specified in RCSA §22a-174-7.
Public Availability of Information	RCSA 22a-174-10	The public availability of information shall apply, as specified in RCSA §22a-174-10.
Prohibition against Concealment/ circumvention	RCSA §22a-174-11	The permittee shall comply with the prohibition against concealment or circumvention as specified in RCSA §22a-174-11.
Particulates	RCSA §22a-174-18	The permittee shall comply with the standards for control of particulate emissions as specified in RCSA §22a-174-18.
Sulfur Compounds	RCSA §22a-174-19	The permittee shall comply with the standards for control of sulfur compound emissions as specified in RCSA §22a-174-19.
Organic Compounds	RCSA §22a-174-20	The permittee shall comply with the standards for control of organic compound emissions as specified in RCSA §22a-174-20.

Table III.L. PREMISES-WIDE GENERAL REQUIREMENTS, continued

Pollutants or Process Parameters	Applicable Regulatory References/Citations	Compliance Demonstration Requirements
Nitrogen Oxides	RCSA §22a-174-22	The permittee shall comply with the standards for control of nitrogen oxides emissions as specified in RCSA §22a-174-22.
Emission Fees	RCSA §22a-174-26	The permittee shall pay an emission fee in accordance with RCSA §22a-174-26.
VOC emissions from Surface Coating Operations	CP/OP 104-0126 Part IV.B	The permittee shall ensure that premises-wide emissions of VOCs from all surface coating operations are limited to 1,666 pounds per calendar month and 10 tons per year. [CP/OP 104-0126 Part II.C.1 & IV.B] The permittee shall keep records of the coatings used and amount of consumption for each one, plus the VOCs emitted on a monthly and yearly basis. The consecutive twelve months coating usage and VOCs shall be calculated each calendar month by adding the current month's fuel usage to that of the previous eleven months. The permittee shall record these figures monthly. [RCSA §22a-174-33(j)(1)(K)(ii)]
Control Techniques Guideline	CP/OP 104-0126 Part IV.A	The permittee shall comply with the EPA Control Techniques Guideline: Control of Volatile Organic Compound Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations EPA-453/R-97-004. [CP/OP 104-0126 Part IV.A]
Aerospace MACT	40 CFR 63, Subpart GG	The permittee shall comply with the national emission standards for aerospace manufacturing and rework facilities as specified in 40 CFR 63, Subpart GG.
Housekeeping measures	40 CFR 63, Subpart GG	Each owner or operator of a new or existing cleaning operation subject to this subpart shall comply with the requirements in these paragraphs unless the cleaning solvent used is identified in Table 1 of this section or contains HAP and VOC below the de minimis levels specified in §63.741(f). [40 CFR §63.744(a)] (1) Place cleaning solvent-laden cloth, paper, or any other absorbent applicators used for cleaning in bags or other closed containers upon completing their use. Ensure that these bags and containers are kept closed at all times except when depositing or removing these materials from the container. Use bags and containers such design so as to contain the vapors of the cleaning solvent. Cotton tipped swabs used for very small cleaning operations are exempt from this requirement. (2) Store fresh and spent cleaning solvents, except semi-aqueous solvent cleaners, used in aerospace cleaning operations in closed containers. (3) Conduct the handling and transfer of cleaning solvents to or from enclosed systems, vats, waste containers and other cleaning operation equipment that holds or store fresh or spent cleaning solvents in such a manner that minimizes spills.

Table III.L:.PREMISES-WIDE GENERAL REQUIREMENTS, continued

Pollutants or Process Parameters	Applicable Regulatory References/Citations	Compliance Demonstration Requirements
Miscellaneous Hand Wipe Cleaning	40 CFR 63, Subpart GG	Each owner or operator of a new or existing hand-wipe cleaning operation (excluding cleaning of spray gun equipment performed in accordance with paragraph (c) of §63.744) subject to this subpart shall use cleaning solvents that meet one of the requirements specified in paragraphs (b)(1), (b)(2) and (b)(3) of this section. Cleaning solvent solutions that contain HAP and VOC below the de minimis levels specified in §63.741(f) are exempt from the requirements in paragraphs (b)(1), (b)(2) and (b)(3) of this section. [40 CFR §63.744(b)] (1) Meet one of the composition requirements in Table 1 of this section; (2) Have a composite vapor pressure of 45 mm Hg (24.1 inches of water) or less at 20 ^{o}C (68 ^{o}F); or (3) Demonstrate that the volume of hand-wipe solvents used in cleaning operations has been reduced by at least 60% from a baseline adjusted for production. The baseline shall be established as part of an approved alternative plan administered by the State. The alternative plan shall be submitted by the State under section 112(l) of the Act, and approved by the Administrator, and shall demonstrate that the 60% volume reduction in cleaning solvents provides equivalent reductions to the requirements in paragraph (b)(1) or (b)(2). i. <u>Monitoring and Testing Requirements</u> The permittee shall monitor the solvents used for hand-wipe cleaning operations through records of material purchases and inventory. [RCSA §22a-174-33(j)(1)(K)(ii)] Compliance with the hand-wipe cleaning solvent approved composition list specified in §63.744(b)(1) for hand-wipe cleaning solvents shall be demonstrated using data supplied by the manufacturer of the cleaning solvent. The data shall identify all components of the cleaning solvent and shall demonstrate that one of the approved composition definitions is met. [40 CFR §63.750(a)] The composite vapor pressure of hand-wipe cleaning solvents used in a cleaning operation subject to this subpart shall be determined using the methods specified in paragraphs (b)(1) and (b)(2) of this section. [40 CFR §63.750(b)]

Table III.L. PREMISES-WIDE GENERAL REQUIREMENTS, continued

Pollutants or Process Parameters	Applicable Regulatory References/Citations	Compliance Demonstration Requirements
Miscellaneous Hand Wipe Cleaning	40 CFR 63, Subpart GG	ii. Record Keeping Requirements The permittee shall make and keep records of the solvents used for hand-wipe cleaning operations. [40 CFR Part 63 Subpart GG] [RCSA §22a-174-33(j)(1)(K)(ii)] Each owner or operator of a new or existing cleaning operation subject to this subpart shall record the following information, as appropriate. [40 CFR §63.752(b)]: (1) The name, vapor pressure, and documentation showing the organic HAP constituents of each cleaning solvent used for affected cleaning operations at the facility. (2) For each cleaning solvent used in hand-wipe cleaning operations that complies with the composition requirements specified in §63.744(b)(1) or for semi-aqueous cleaning solvents used for flush cleaning operations: (i) The name of each cleaning solvent used; (ii) All data and calculations that demonstrate that the cleaning solvent complies with one of the composition requirements; and (iii) Annual record of the volume of each solvent used, as determined from facility purchase records or usage records. (3) For each cleaning solvent used in hand-wipe cleaning operations that does not comply with the composition requirements in §63.744(b)(1), but does comply with the vapor pressure requirement in §63.744(b)(2): (i) The name of each cleaning solvent used; (ii) The composite vapor pressure of each cleaning solvent used; (iii) All vapor pressure test results, if appropriate, data, and calculations used to determine the composite vapor pressure of each cleaning solvent; and (iv) The amount (in gallons) of each cleaning solvent used each month at each operation. (4) For each cleaning solvent used for exempt hand-wipe cleaning operations specified in §63.744(e) that does not conform to the vapor pressure or composition requirements of §63.744(b): (i) The identity and amount (in gallons) of each cleaning solvent used each month at each operation: and (ii) A list of the processes set forth in §63.744(e) to which the cleaning operation applies.

Table III.L. PREMISES-WIDE GENERAL REQUIREMENTS, continued

Pollutants or Process Parameters	Applicable Regulatory References/Citations	Compliance Demonstration Requirements
Miscellaneous Hand Wipe Cleaning	40 CFR 63, Subpart GG	iii. Reporting Requirements Each owner or operator of a cleaning operation subject to this subpart shall submit the following information [40 CFR §63.753(b)]: (1) Semiannual reports occurring every 6 months from the date of notification of compliance status that identify: (i) Any instance where a noncompliant cleaning solvent is used for a non-exempt hand-wipe cleaning operation; (ii) A list of any new cleaning solvents used for hand-wipe cleaning in the previous 6 months and, as appropriate, their composite vapor pressure or notification that they comply with the composition requirements specified in §63.744(b)(1); and (v) If the operations have been in compliance for the semiannual period, a statement that the cleaning operations have been in compliance with the applicable standards. Sources shall also submit a statement of compliance signed by a responsible company official certifying that the facility is in compliance with all applicable requirements.

Section III: Applicable Requirements and Compliance Demonstration

M. WORK PRACTICE STANDARDS AND OPERATION AND MAINTENANCE (O&M) PRACTICES

Table III.M. Work Practice Standards and Operation and Maintenance (O&M) Practices

Emissions Unit Identification	Applicable Regulatory References/Citations	Work/O&M Practice Requirements
GEMU-003, EMU-004, EMU-005, EMU-006, GEMU-007	OP 104-0028,29 OP 104-0027, OP 104-0062, OP 104-0030, CP/OP 104-0077,78,80	The permittee shall properly operate, inspect and maintain the equipment in accordance with the manufacturer's specifications and recommendations.
GEMU-014	RCSA §22a-174-20 (l)(3)	The permittee shall meet all of the following required work and operational practices as applicable. i. Store waste degreasing solvent only in covered containers and not dispose of waste degreasing solvent or transfer it to another party, in a manner such that greater than 20 percent of the waste degreasing solvent (by weight) can evaporate into the atmosphere. [RCSA §22a-174-20(l)(3)(C)] ii. Close the cover whenever parts are not being handled in the cleaner for two (2) minutes or more, or when the device is not in use. [RCSA §22a-174-20(l)(3)(D)] iii. Drain the clean parts for at least 15 seconds or until dripping ceases, whichever is longer. [RCSA §22a-174-20(l)(3)(E)] iv. If used, supply a degreasing solvent spray that is a solid fluid stream (not a fine, atomized or shower type spray) at a pressure which does not exceed ten (10) pounds per square inch as measured at the pump outlet and perform such spraying within the confines of the cold cleaning unit. [RCSA §22a-174-20(l)(3)(F)] v. Minimize the drafts across the top of each cold cleaning unit such that whenever the cover is open the unit is not exposed to drafts greater than 40 meters per minute, as measured between 1 and 2 meters upwind, and at the same elevation as the tank lip. [RCSA §22a-174-20(l)(3)(H)] vi. Do not operate the unit upon the occurrence of any visible solvent leak until such leak is repaired. [RCSA §22a-174-20(l)(3)(I)]

Section IV: Compliance Schedule

NOT APPLICABLE

TABLE IV: COMPLIANCE SCHEDULE				
Emissions units	Applicable regulations	Steps required for achieving compliance (Milestones)	Date by which each step is to be completed	Dates for monitoring, record keeping, and reporting
N/A				

Section V: State Terms and Conditions

Only the Commissioner of the Department of Environmental Protection has the authority to enforce the terms, conditions and limitations contained in this section.

A. This permit does not relieve the permittee of the responsibility to conduct, maintain and operate the emissions units in compliance with all applicable requirements of any other Bureau of the Department of Environmental Protection or any federal, local or other state agency. Nothing in this permit shall relieve the permittee of other obligations under applicable federal, state and local law.

B. Nothing in this permit shall affect the Commissioner's authority to institute any proceeding or take any other action to prevent or abate violations of law, prevent or abate pollution, investigate air pollution, recover costs and natural resource damages, and to impose penalties for violations of law, including but not limited to violations of this or any other permit issued to the permittee by the Commissioner.

C. Odors: The permittee shall not cause or permit the emission of any substance or combination of substances which creates or contributes to an odor that constitutes a nuisance beyond the property boundary of the premises as set forth in RCSA Section 22a-174-23.

D. Noise: The permittee shall operate in compliance with the regulations for the control of noise as set forth in RCSA 22a-69-1 through 22a-69-7.4, inclusive.

E. Hazardous Air Pollutants (HAPs): The permittee shall operate in compliance with the regulations for the control of HAPs as set forth in RCSA §22a-174-29.

F. Open Burning: The permittee is prohibited from conducting open burning, except as may be allowed by CGS 22a-174(f).

G. Fuel Sulfur Content: The permittee shall not use #2 heating oil that exceeds three-tenths of one percent sulfur by weight as set forth in CGS 22a-21a.

Section VI: Permit Shield

NO PERMIT SHIELD HAS BEEN GRANTED.

In accordance with Section 22a-174-33(k) of the RCSA, a permittee complying with the conditions of this permit shall be deemed in compliance with any applicable requirements identified in Table VI below as of the date of issuance. Also, in accordance with Section 22a-174-33(k) of the RCSA, a permittee complying with the conditions of this permit shall be deemed exempt from any non-applicable requirements identified below as of the date of issuance.

This permit shall not alter or affect the following:

A. the provisions of section 303 of the Clean Air Act, including the authority of the Administrator under the Act;

B. the liability of an owner or operator of a Title V source for any violation of applicable requirements prior to or at the effective date of a Title V permit;

C. the applicable requirements of the acid rain program under 40 CFR Part 72; and

D. the ability of the Administrator or Commissioner to obtain information from the owner or operator of a Title V source.

TABLE VI: PERMIT SHIELD

Regulated Pollutants	Emissions Units	Applicable Requirement or Non-Applicable Requirement Descriptions	Applicable Regulatory References	*Applicability

***For Applicability, use AR to indicate Applicable Requirement and NR for Non- Applicable Requirement**

Section VII: Title V Requirements

The Administrator of the United States Environmental Protection Agency and the Commissioner of Environmental Protection have the authority to enforce the terms and conditions contained in these sections.

A. SUBMITTALS TO THE COMMISSIONER & ADMINISTRATOR

The date of submission to the Commissioner of any document required by this permit shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under this permit, including, but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is delivered or the date three days after it is mailed by the Commissioner, whichever is earlier. Except as otherwise specified in this permit, the word "day" means calendar day. Any document or action which is required by this permit to be submitted or performed by a date which falls on a Saturday, Sunday or legal holiday shall be submitted or performed by the next business day thereafter.

Any document required to be submitted to the Commissioner under this permit shall, unless otherwise specified in writing by the Commissioner, be directed to: Office of the Assistant Director; Compliance & Field Operations Division; Bureau of Air Management; Department of Environmental Protection; 79 Elm Street, 5th Floor; Hartford, Connecticut 06106-5127.

Any submittal to the Administrator of the U. S. Environmental Protection Agency shall be in a computer-readable format and addressed to: Director, Air Compliance Program; Attn: Air Compliance Clerk; Office of Environmental Stewardship; US EPA, Region 1;One Congress Street; Suite 1100 (SEA); Boston, MA 02114-2023.

B. CERTIFICATIONS [RCSA § 22a-174-33(b)]

In accordance with Section 22a-174-33(b) of the RCSA, any report or other document required by this Title V permit and any other information submitted to the Commissioner or Administrator shall be signed by an individual described in Section 22a-174-2a(a) of the RCSA, or by a duly authorized representative of such individual. Any individual signing any document pursuant to Section 22a-174-33(b) of the RCSA shall examine and be familiar with the information submitted in the document and all attachments thereto, and shall make inquiry of those individuals responsible for obtaining the information to determine that the information is true, accurate, and complete, and shall also sign the following certification as provided in Section 22a-174-2a(a)(5) of the RCSA:

> "I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information may be punishable as a criminal offense under Section 22a-175 of the Connecticut General Statutes, under Section 53a-157b of the Connecticut General Statutes, and in accordance with any applicable statute."

C. SIGNATORY RESPONSIBILITY [RCSA § 22a-174-2a(a)]

If an authorization pursuant to Section 22a-174-2a(a) of the RCSA is no longer effective because a different individual or position has assumed the applicable responsibility, a new authorization satisfying the requirements of Section 22a-174-2a(a)(2) of the RCSA shall be submitted to the Commissioner prior to or together with the submission of any applications, reports, forms, compliance certifications, documents or other information which is signed by an individual or a duly authorized representative of such individual pursuant to Section 22a-174-2a(a)(2) of the RCSA.

Section VII: Title V Requirements

D. ADDITIONAL INFORMATION [RCSA § 22a-174-33(j)(1)(X)]

The permittee shall submit additional information in writing, at the Commissioner's request, within thirty (30) days of receipt of notice from the Commissioner or by such other date specified by the Commissioner, whichever is earlier, including information to determine whether cause exists for modifying, revoking, reopening, reissuing, or suspending the permit or to determine compliance with the permit.

In addition, within fifteen days of the date the permittee becomes aware of a change in any information submitted to the Commissioner under this permit or of any change in any information contained in the application, or that any such information was inaccurate or misleading or that any relevant information was omitted, the permittee shall submit the changed, corrected, or omitted information to the Commissioner.

E. MONITORING REPORTS [RCSA § 22a-174-33(o)(1)]

A permittee, required to perform monitoring pursuant this permit, shall submit to the Commissioner, on forms prescribed by the Commissioner, written monitoring reports on January 30 and July 30 of each year or on a more frequent schedule if specified in such permit. Such monitoring reports shall include the date and description of each deviation from a permit requirement including, but not limited to:

1. Each deviation caused by upset or control equipment deficiencies; and

2. Each deviation of a permit requirement that has been monitored by the monitoring systems required under this permit, which has occurred since the date of the last monitoring report; and

3. Each deviation caused by a failure of the monitoring system to provide reliable data.

F. PREMISES RECORDS [RCSA § 22a-174-33(o)(2)]

Unless otherwise required by this permit, the permittee shall make and keep records of all required monitoring data and supporting information for at least five (5) years from the date such data and information were obtained. The permittee shall make such records available for inspection at the site of the subject source, and shall submit such records to the Commissioner upon request. The following information, in addition to required monitoring data, shall be recorded for each permitted source:

1. The type of monitoring or records used to obtain such data, including record keeping;

2. The date, place, and time of sampling or measurement;

3. The name of the individual who performed the sampling or the measurement and the name of such individual's employer;

4. The date(s) on which analyses of such samples or measurements were performed;

5. The name and address of the entity that performed the analyses;

6. The analytical techniques or methods used for such analyses;

7. The results of such analyses;

F. PREMISES RECORDS, continued [RCSA § 22a-174-33(o)(2)]

8. The operating conditions at the subject source at the time of such sampling or measurement; and

9. All calibration and maintenance records relating to the instrumentation used in such sampling or measurements, all original strip-chart recordings or computer printouts generated by continuous monitoring instrumentation, and copies of all reports required by the subject permit.

G. PROGRESS REPORTS [RCSA § 22a-174-33(q)(1)]

The permittee shall, on January 30 and July 30 of each year, or on a more frequent schedule if specified in this permit, submit to the Commissioner a progress report on forms prescribed by the Commissioner, and certified in accordance with Section 22a-174-2a(a)(5) of the RCSA. Such report shall describe the permittee's progress in achieving compliance under the compliance plan schedule contained in this permit. Such progress report shall:

1. Identify those obligations under the compliance plan schedule in the permit which the permittee has met, and the dates on which they were met; and

2. Identify those obligations under the compliance plan schedule in this permit which the permittee has not timely met, explain why they were not timely met, describe all measures taken or to be taken to meet them and identify the date by which the permittee expects to meet them.

Any progress report prepared and submitted pursuant to Section 22a-174-33(q)(1) of the RCSA shall be simultaneously submitted by the permittee to the Administrator.

H. COMPLIANCE CERTIFICATIONS [RCSA § 22a-174-33(q)(2)]

The permittee shall, on January 30 of each year, or on a more frequent schedule if specified in this permit, submit to the Commissioner, a written compliance certification certified in accordance with Section 22a-174-2a(a)(5) of the RCSA and which includes the information identified in Title 40 CFR 70.6(c)(5)(iii)(A) to (C), inclusive.

Any compliance certification prepared and submitted pursuant to Section 22a-174-33(q)(2) of the RCSA shall be simultaneously submitted by the permittee to the Administrator.

I. PERMIT DEVIATION NOTIFICATIONS [RCSA § 22a-174-33(p)]

Notwithstanding Subsection D of Section VII of this permit, the permittee shall notify the Commissioner in writing, on forms prescribed by the Commissioner, of any deviation from an emissions limitation, and shall identify the cause or likely cause of such deviation, all corrective actions and preventive measures taken with respect thereto, and the dates of such actions and measures as follows:

1. For any hazardous air pollutant, no later than twenty-four (24) hours after such deviation commenced; and

2. For any other regulated air pollutant, no later than ten (10) days after such deviation commenced.

J. PERMIT RENEWAL [RCSA § 22a-174-33(j)(1)(B)]

All of the terms and conditions of this permit shall remain in effect until the renewal permit is issued or denied provided that a timely renewal application is filed in accordance with Sections 22a –174-33(g), -33(h), and –33(i) of the RCSA.

Section VII: Title V Requirements

K. OPERATE IN COMPLIANCE [RCSA § 22a-174-33(j)(1)(C)]

The permittee shall operate the source in compliance with the terms of all applicable regulations, the terms of this permit, and any other applicable provisions of law. In addition, any noncompliance constitutes a violation of the Clean Air Act and Chapter 446c of the Connecticut General Statutes and is grounds for federal and/or state enforcement action, permit termination, revocation and reissuance, or modification, and denial of a permit renewal application.

L. COMPLIANCE WITH PERMIT [RCSA § 22a-174-33(j)(1)(G)]

This permit shall not be deemed to:

1. preclude the creation or use of emission reduction credits or the trading of such credits in accordance with Sections 22a-174-33(j)(1)(I) and 22a-174-33(j)(1)(P) of the RCSA, provided that the Commissioner's prior written approval of the creation, use, or trading is obtained;

2. authorize emissions of an air pollutant so as to exceed levels prohibited under 40 CFR Part 72;

3. authorize the use of allowances pursuant to 40 CFR Parts 72 through 78, inclusive, as a defense to noncompliance with any other applicable requirement; or

4. impose limits on emissions from items or activities specified in Sections 22a-174-33(g)(3)(A) and (B) of the RCSA unless imposition of such limits is required by an applicable requirement.

M. INSPECTION TO DETERMINE COMPLIANCE [RCSA § 22a-174-33(j)(1)(M)]

The Commissioner may, for the purpose of determining compliance with the permit and other applicable requirements, enter the premises at reasonable times to inspect any facilities, equipment, practices, or operations regulated or required under the permit; to sample or otherwise monitor substances or parameters; and to review and copy relevant records lawfully required to be maintained at such premises in accordance with this permit. It shall be grounds for permit revocation should entry, inspection, sampling, or monitoring be denied or effectively denied, or if access to and the copying of relevant records is denied or effectively denied.

N. PERMIT AVAILABILITY

The permittee shall have available at the facility at all times a copy of this Title V Operating Permit.

O. SEVERABILITY CLAUSE [RCSA § 22a-174-33(j)(1)(R)]

The provisions of this permit are severable. If any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the remainder of this permit and the application of such provision to other circumstances shall not be affected.

P. NEED TO HALT OR REDUCE ACTIVITY [RCSA § 22a-174-33(j)(1)(T)]

It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

Section VII: Title V Requirements

Q. PERMIT REQUIREMENTS [RCSA § 22a-174-33(j)(1)(V)]

The filing of an application or of a notification of planned changes or anticipated noncompliance does not stay the permittee's obligation to comply with this permit.

R. PROPERTY RIGHTS [RCSA § 22a-174-33(j)(1)(W)]

This permit does not convey any property rights or any exclusive privileges. This permit is subject to, and in no way derogates from any present or future property rights or other rights or powers of the State of Connecticut, and is further subject to any and all public and private rights and to any federal, state or local laws or regulations pertinent to the facility or regulated activity affected thereby, including Section 4-181a(b) of the Connecticut General Statutes and Section 22a-3a-5(b) of the RCSA. This permit shall neither create nor affect any rights of persons who are not parties to this permit.

S. ALTERNATIVE OPERATING SCENARIO RECORDS [RCSA § 22a-174-33(o)(3)]

The permittee shall, contemporaneously with making a change authorized by this permit from one alternative operating scenario to another, maintain a record at the premises indicating when changes are made from one operating scenario to another and shall maintain a record of the current alternative operating scenario.

T. OPERATIONAL FLEXIBILITY AND OFF-PERMIT CHANGES [RCSA § 22a-174-33(r)(2)]

The permittee may engage in any action allowed by the Administrator in accordance with 40 CFR 70.4(b)(12)(i) to (iii)(B) inclusive, and 40 CFR 70.4(b)(14)(i) to (iv), inclusive without a Title V non-minor permit modification, minor permit modification or revision and without requesting a Title V non-minor permit modification, minor permit modification or revision provided such action does not:

1. constitute a modification under 40 CFR 60, 61 or 63,

2. exceed emissions allowable under the subject permit,

3. constitute an action which would subject the permittee to any standard or other requirement pursuant to 40 CFR 72 to 78, inclusive, or

4. constitute a non-minor permit modification pursuant to Section 22a-174-2a(d)(4) of the RCSA.

At least seven (7) days before initiating an action specified in Section 22a-174-33(r)(2)(A) of the RCSA, the permittee shall notify the Administrator and the Commissioner in writing of such intended action.

U. INFORMATION FOR NOTIFICATION [RCSA § 22a-174-33(r)(2)(A)]

Written notification required under Section 22a-174-33(r)(2)(A) of the RCSA shall include a description of each change to be made, the date on which such change will occur, any change in emissions that may occur as a result of such change, any Title V permit terms and conditions that may be affected by such change, and any applicable requirement that would apply as a result of such change. The permittee shall thereafter maintain a copy of such notice with the Title V permit. The Commissioner and the permittee shall each attach a copy of such notice to their copy of the permit.

Section VII: Title V Requirements

V. TRANSFERS [RCSA § 22a-174-2a(g)]

No person other than the permittee shall act or refrain from acting under the authority of this permit unless this permit has been transferred to another person in accordance with Section 22a-174-2a(g) of the RCSA.

The proposed transferor and transferee of a permit shall submit to the Commissioner a request for a permit transfer on a form provided by the Commissioner. A request for a permit transfer shall be accompanied by any fees required by any applicable provision of the general statutes or regulations adopted thereunder. The Commissioner may also require the proposed transferee to submit with any such request, the information identified in CGS Section 22a-6m.

W. REVOCATION [RCSA § 22a-174-2a(h)]

The Commissioner may revoke this permit on his own initiative or on the request of the permittee or any other person, in accordance with Section 4-182c of the Connecticut General Statutes, Section 22a-3a-5(d) of the RCSA, and any other applicable law. Any such request shall be in writing and contain facts and reasons supporting the request. The permittee requesting revocation of this permit shall state the requested date of revocation and provide the Commissioner with satisfactory evidence that the emissions authorized by this permit have been permanently eliminated.

Pursuant to the Clean Air Act, the Administrator has the power to revoke this permit. Pursuant to the Clean Air Act, the Administrator also has the power to reissue this permit if the Administrator has determined that the Commissioner failed to act in a timely manner on a permit renewal application.

This permit may be modified, revoked, reopened, reissued, or suspended by the Commissioner, or the Administrator in accordance with Section 22a-174-33(r) of the RCSA, Connecticut General Statutes Section 22a-174c, or Section 22a-3a-5(d) of the RCSA.

X. REOPENING FOR CAUSE [RCSA § 22a-174-33(s)]

This permit may be reopened by the Commissioner, or the Administrator in accordance with Section 22a-174-33(s) of the RCSA.

Y. CREDIBLE EVIDENCE

Notwithstanding any other provision of this permit, for the purpose of determining compliance or establishing whether a permittee has violated or is in violation of any permit condition, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information.